(24,893)

# SUPREME COURT OF THE UNITED STATES.

**OCTOBER TERM, 1916.**

## No. 232.

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THE NEWARK NATURAL GAS AND FUEL COMPANY, PLAINTIFF IN ERROR,

*vs.*

THE CITY OF NEWARK, OHIO.

---

IN ERROR TO THE SUPREME COURT OF THE STATE OF OHIO.

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INDEX.


| | Original. | Print |
|---|---|---|
| Petition in error | 1 | 1 |
| Proceedings in the court of appeals | 3 | 2 |
| Motion for a new trial | 3 | 2 |
| Docket and journal entries | 4 | 2 |
| Judgment | 5 | 3 |
| Proceedings in the court of common pleas | 6 | 4 |
| Petition | 6 | 4 |
| Ordinance No. 1318 | 11 | 6 |
| Acceptance of franchise ordinance by Newark Natural Gas Co. | 14 | 8 |
| Ordinance No. 2123 | 15 | 9 |
| Amended answer | 17 | 10 |
| Reply | 19 | 11 |
| Docket and journal entries | 20 | 12 |
| Proceedings in the court of appeals | 27 | 16 |
| Bill of exceptions | 27 | 16 |
| Ordinance No. 1318 | 28 | 16 |


JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., JULY 5, 1916.

| | Original. | Print |
|---|---|---|
| Testimony of Samuel S. Wyer | 32 | 19 |
| J. Hope Sutor | 79 | 44 |
| William C. Christian | 84 | 47 |
| Fred C. Evans | 92 | 52 |
| Stipulations to bill of exceptions | 95 | 53 |
| Exhibit AAA—Valuation of property | 98 | 55 |
| BBB—Investments by sub-accounts | 115 | 62 |
| CCC—Newark expenses by sub-accounts | 116 | 62 |
| AA—Transcript of stenographic notes of proceedings in court of common pleas | 117 | 63 |
| Testimony of Frank Neighbor | 119 | 64 |
| Harold Franklin | 120 | 65 |
| Herman Elsner | 131 | 71 |
| Elmer Orr | 135 | 73 |
| Phil. Vogelmeier | 138 | 74 |
| Mr. Muenz | 140 | 75 |
| Oliver Irwin | 143 | 77 |
| John A. Pryor | 144 | 78 |
| K. C. Krick | 146 | 79 |
| Samuel S. Wyer | 149 | 80 |
| Wm. D. Stoughton | 228 | 124 |
| Judge Levering | 244 | 134 |
| Fenwick Ewing | 256 | 141 |
| D. A. Upham | 279 | 155 |
| Fenwick Ewing (recalled) | 300 | 167 |
| John M. Gerard | 301 | 168 |
| M. E. Lytle | 329 | 184 |
| D. W. Wallace | 342 | 192 |
| Henry Coyle | 357 | 202 |
| R. S. Lord | 373 | 212 |
| C. L. Riley | 387 | 220 |
| Roderic Jones | 390 | 221 |
| John I. Henderson | 392 | 222 |
| C. L. Riley (recalled) | 395 | 224 |
| J. B. Waight | 398 | 226 |
| John I. Henderson (recalled) | 404 | 230 |
| W. D. Stoughton (recalled) | 426 | 243 |
| Roderic Jones (recalled) | 432 | 247 |
| W. V. Wonderley | 434 | 248 |
| A. J. Drolet | 441 | 253 |
| J. A. Snoke | 456 | 261 |
| A. J. Drolet (recalled) | 459 | 263 |
| Agreement between Logan Natural Gas and Fuel Co. and The Newark Natural Gas and Fuel Co., March 24, 1904 | 480 | 274 |
| Testimony of John Henderson (recalled) | 498 | 283 |
| A. J. Drolet (recalled) | 499 | 284 |
| K. C. Krick (recalled) | 562 | 322 |
| Deposition of T. N. Barnsdahl | 567 | 325 |
| Testimony of J. S. Graham | 582 | 334 |
| J. Hope Sutor | 585 | 336 |

| | Original. | Print |
|---|---|---|
| Exhibit A—Depreciation of natural gas wells in Ohio.. | 634 | 366 |
| B—Plat of Sugar Grove field, 1912..... | 635 | 367 |
| C—Plat of Homer field, 1912..... | 636 | 368 |
| D—Plat of natural gas transmission lines, &c.. | 637 | 369 |
| E—Factors determining cost of natural gas... | 638 | 370 |
| F—Comparative chart of public utilities..... | 639 | 371 |
| Exhibits G, H, I, J, K, $L^1$, $L^2$, $L^3$, $L^4$, $L^5$, $L^6$, $L^7$, $L^8$, $L^9$, $L^{10}$, $L^{11}$, $L^{12}$, $L^{13}$, $L^{14}$, $L^{15}$, $L^{16}$, and $L^{17}$—Diagrams showing decline in rock pressure of natural gas wells of the different companies..... | 640 | 372 |
| Exhibits M and N—Statement of gas well data pertaining to Logan Natural Gas & Fuel Co..... | 662 | 394 |
| Exhibits $O^1$, $O^2$, $O^3$, $O^4$, and $O^5$—Statement of gas well data pertaining to Columbus Gas & Fuel Co..... | 707 | 441 |
| Exhibit P—Statement showing cost of production, &c.. | 748 | 485 |
| Q—Statement showing average price per 1,000, &c. ..... | 749 | 486 |
| R—Statement showing proportion of total gas produced, &c. ..... | 750 | 487 |
| S—Statement showing net earnings from gas operations ..... | 751 | 488 |
| U—Statement showing investment, earnings, &c. | 752 | 489 |
| Exhibits $U^1$, $U^2$, and $U^3$—Statement showing accounting for surplus, &c..... | 753 | 490 |
| Exhibit 1—Tax statement of Newark, etc., Co., 1908... | 756 | 493 |
| 2—Tax statement of Newark, etc., Co., 1909... | 757 | 494 |
| 3—Tax statement of Newark, etc., Co., 1910... | 758 | 495 |
| 4—Statement showing average rock pressure.. | 759 | 495 |
| Clerk's return to writ of error..... | 760 | 497 |
| Petition for writ of error and allowance..... | 761 | 497 |
| Assignment of errors..... | 764 | 499 |
| Writ of error..... | 766 | 500 |
| Bond on writ of error..... | 768 | 501 |
| Citation and service..... | 770 | 502 |
| Præcipe for record..... | 771 | 503 |
| Opinion, Matthias, J..... | 773 | 503 |
| Docket entries ..... | 788 | 510 |
| Judgment ..... | 789 | 511 |
| Order allowing writ of error..... | 790 | 512 |
| Order certifying grounds of judgment..... | 791 | 513 |
| Clerk's certificate ..... | 792 | 514 |
| Certificate of lodgment..... | 793 | 514 |

1 In the Supreme Court of the State of Ohio.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY, Plaintiff in Error,
vs.
THE CITY OF NEWARK, OHIO, by FRANK A. BOLTON, Solicitor, Defendant in Error.

*Petition in Error.*

(Filed Dec. 4, 1914.)

The plaintiff in error complains of the defendant in error for that at the October term, A. D. 1914 of the Court of Appeals in and for Licking County, Ohio, in an action then pending in said court in which the plaintiff in error was defendant and the defendant in error was plaintiff, a judgment was rendered in favor of the defendant in error and against the plaintiff in error.

2 A transcript of the docket and journal entries in said case is hereto attached, marked Exhibit "A", and made a part of this petition in error, and also all the original papers in said action.

There is error in said record and proceedings prejudicial to the rights of the plaintiff in error, which errors occurred over the objection and exceptions of the plaintiff in error, pointed out by it as follows:

1. The judgment of the Court of Appeals was against the weight of the evidence and is not sustained by sufficient evidence.

2. Said judgment of the Court of Appeals is contrary to law and in violation of Sec. 19 of Article 1 of the Bill of Rights of the State of Ohio and of Sec. 1, Article 14 of the Amendment to the Constitution of the United States.

3. Said judgment should have been rendered for the plaintiff in error and against the defendant in error.

4. The court erred in overruling plaintiff's in error motion for new trial.

5. Other errors apparent upon inspection of the record.

Wherefore plaintiff in error prays that said judgment be set aside and reversed and that the plaintiff in error be restored to all things it has lost by reason thereof.

EUGENE MACKEY,
S. M. DOUGLASS,
FITZGIBBON, MONTGOMERY & BLACK,
*Attorneys for Plaintiff in Error.*

(Waiver omitted.)

3 Court of Appeals.

THE CITY OF NEWARK, OHIO, Plaintiff,
vs.
THE NEWARK NATURAL GAS AND FUEL COMPANY, Defendant.

*Motion for New Trial.*

(Filed Sept. 28, 1914.)

Now comes the defendant and moves the court to set aside and vacate the decision heretofore rendered in this action and grant the defendant a new trial for the reasons following:

1. Said decision is contrary to law.
2. Said decision is not sustained by sufficient evidence and is contrary to the manifest weight of the evidence.
3. Said decision should have been for the defendant and not for the plaintiff.
4. Other errors apparent upon the records.

EUGENE MACKEY,
S. M. DOUGLASS,
FITZGIBBON, MONTGOMERY & BLACK,
*Attorneys for Defendant.*

4 Court of Appeals.

*Journal and Docket Entries.*

Aug. 9, 1913. Transcript of journal and docket entries from Common Pleas Court filed.
Aug. 9, 1913. Twelve (12) original papers filed.
Sept. 26, 1914. Opinion of Court of Appeals filed.
Sept. 28, 1914. Motion for new trial filed and copy.
Oct. 27, 1914. Bill of Exceptions filed by defendant.
Oct. 27, 1914. Notice of filing of Bill of Exceptions delivered to F. A. Bolton, Ralph Norpell & Kibler & Kibler, Att'ys for Plaintiff.
Nov. 7, 1914. Bill of Exceptions forwarded to Hon. R. M. Voorhees, Judge of Court of Appeals and one of trial Judges in this case at Zanesville, Ohio. B. O. Horton, Clerk.
Nov. 13, 1914. Bill of Exceptions received from Judge of Court of Appeals and filed.

*Entry.*

And afterwards, to-wit at the April Term, A. D. 1914 on the 28th day of April, A. D. 1914 the following proceedings were had to-wit:
This day came the parties and also came Walter C. Metz, Receiver heretofore appointed in this case by this court, and this cause

came on for hearing upon the application made by said Receiver for an order of this court to pay the sum of $506.03, the amount of the taxes levied and assessed upon the funds in the hands of the Receiver, assessed in April, 1913 and due December 20th, 1913 and the evidence and the court on consideration finds that said
5 taxes were legally assessed against said funds in the hands of said Receiver and that the amount above mentioned is due and payable by said Receiver and is a valid debt against the funds in the Receiver's hands and ought to be paid.

It is therefore ordered by the court that said Receiver pay said amount to the Treasurer of said County and that he be allowed a credit for said payment, accordingly.

And on motion of the Receiver heretofore appointed in this case and by consent of all parties hereto it is ordered, adjudged and decreed by this court that The Newark Trust Company of Newark, Ohio, be designated and appointed as the legal depository of the funds in the hands of the Receiver and those which may hereafter come into his hands as such Receiver.

*Entry.*

And afterwards to-wit at the October Term, A. D. 1914 on the 12th day of November, A. D. 1914 the following proceedings were had to-wit:

This day this cause came on to be heard on the pleadings and the evidence and was argued by counsel, and the court being fully advised in the premises finds that the allegations of the petition and reply are true and that the allegations of the answer so far as they are inconsistent with the allegations of the petition and reply are not true, and that the equity of the case is with the plaintiff. Whereupon it is ordered, adjudged and decreed that the defendant be perpetually enjoined from charging, collecting or attempting in any way to collect from the City of Newark or any of the inhabitants, any other or further sum or amount for gas furnished or delivered for heat and light, than the maximum sum or amount or
6 rate fixed by the ordinance of said city passed March 6, 1911 and to pay the costs of this action, taxed at $— and that the Receiver, Walter C. Metz heretofore appointed in this action, repay, within thirty days of this date to such inhabitants of the City of Newark, who have since May 11, 1911 paid to the defendant any further sum for gas furnished to them by the defendant than the rates fixed by the ordinance aforesaid, the said further sum so by each of said inhabitants paid, to all of which the said defendant excepts.

This finding and decree of the court is made however without prejudice to the right of the defendant, Company, at any time to apply to a court of competent jurisdiction to modify said finding, if at any time it should appear that said rate of 18¢ net does not render an adequate return to said defendant Company.

And thereupon a motion for new trial on behalf of said defendant

was overruled, to all of which finding and judgment of the court on the issues joined and in overruling the motion for a new trial the defendant excepts and the statutory time is allowed for the filing of a bill of exceptions.

(Duly certified.)

Court of Common Pleas.

*Petition.*

(Filed April 25, 1911.)

Plaintiff says that he is the duly elected, qualified and acting Solicitor of the City of Newark, Ohio, a municipal corporation of the State of Ohio of the grade of city, and that he brings
7 this action under and by virtue of authority conferred upon him by Section 4312 of the General Code of the State of Ohio, and under direction of the city council of said City of Newark by resolution duly passed by said council.

That the defendant, The Newark Natural Gas & Fuel Company, is a corporation organized under the laws of the State of Ohio and doing business in the City of Newark by furnishing natural gas for fuel and light to the city of Newark aforesaid and to the inhabitants thereof, by virtue of a franchise granted by the Council of said city by ordinance passed February 21, 1898.

By said ordinance there was granted to defendant company the right and privilege of laying pipes in and through the streets and alleys and public grounds of said city for the purpose of supplying and conveying natural gas or fuel gas to the inhabitants of said city for a period of twenty-five years. It was provided in said ordinance that for the period of ten years from the passage of said ordinance, the defendant company should have the right to charge consumers of gas who were inhabitants of said city for gas furnished at the rate of twenty-five cents for one thousand cubic feet.

By the terms and provisions of said ordinance the acceptance of the same in writing was required to be filed with the Council of said City of Newark within ninety days after the passage and taking effect of said ordinance. Said ordinance was duly published according to law and is now in full force.

That within ninety days from the passing and taking effect of said ordinance, to-wit, March 21, 1898, the defendant company
8 accepted the same in writing according to the provisions of said ordinance, and thereby agreed to supply gas as fuel and light to the said city and all of its inhabitants who might desire to use natural gas as fuel and light, or either, for the term of twenty-five years from that date.

That a copy of said ordinance, and the acceptance thereof by the defendant, is hereto attached, made part hereof and marked "Exhibit A".

That from the date of the passage of said ordinance franchise up

to and until the 6th day of March, A. D. 1911, the Council of the City of Newark passed no further ordinance regulating the price to be charged by defendant to itself and its inhabitants for gas for fuel and light, or either.

That ever since the passage and acceptance of said ordinance the defendant has been continually, and now is, supplying gas to the said city and its inhabitants by virtue of the rights and privileges granted by said ordinance.

That on the said 6th day of March, A. D. 1911, the Council of said city duly and legally passed an ordinance regulating and fixing the maximum price the defendant may charge consumers thereof, whether the city itself or its inhabitants, under said franchise and contract for the period of five years at the rate of twenty cents per thousand cubic feet of natural gas for fuel and light, meter measurement, with a discount of ten per cent on all bills paid on or before the 10th day of each month.

That said last named ordinance was on the 9th day of March, 1911, duly signed and approved by the Mayor of said city and has now been duly and legally published as required by law and
9 a copy of said last mentioned ordinance is hereto attached, made part hereof and marked "Exhibit B".

That said last mentioned ordinance is now in full force and that the price, as therein fixed by the Council of the City of Newark, Ohio, is the same price said defendant has been, and is now, charging said city and the inhabitants who have been and are now consumers of gas in the City of Newark, Ohio, ever since the defendant began to furnish gas under said ordinance granting said franchise.

That the defendant had due knowledge and notice of the ordinance passed the 6th day of March, A. D. 1911.

That the defendant, now operating under the aforesaid ordinance, is notifying and has notified the inhabitants of said city, and said city, that on and after the April, 1911 reading of meters, the price charged for gas will be twenty-five cents for one thousand cubic feet, subject to a discount of ten per cent if paid on or before the tenth day of the following month, and it threatens that unless said price is paid by said city and its said inhabitants, on or before May 10th, 1911, the time gas bills for April are payable, the defendant will stop the supply of gas and refuse to furnish gas for fuel and light to the said city or any of the inhabitants who refuse to pay said price so fixed by defendant.

That the defendant intends and insists upon its right, to make the price for all gas furnished to the said city or its inhabitants on and after April 1, 1911, the said sum of twenty-five cents per thousand cubic feet, subject to said discount of ten per cent, and no less, and unless restrained by the court, all consumers of gas furnished by the defendant will be required to pay twenty-five cents per thousand cubic feet, subject to said discount, on and after May 1st, 1911,
10 contrary to the provisions of the ordinance of the 6th day of March, 1911.

Plaintiff says that if the city for itself and each inhabitant for themselves be compelled to proceed against the defendant for refus-

ing to furnish gas for fuel and light at the maximum rate provided in the ordinance of the 6th day of March, 1911, a multiplicity of suits would result and that among other reasons, he brings this suit on behalf of the city and all of the inhabitants in order to prevent a multiplicity of suits.

Plaintiff further says that the city and its inhabitants are each and all without remedy at law and can get no adequate relief, and will sustain great and irreparable damage unless granted relief, from the processes of a court of equity, and they have no adequate remedy at law.

Wherefore, plaintiff prays this honorable court that on the final hearing of this case the defendant may be perpetually enjoined from charging, collecting or in any way attempting to collect from the city or any of its inhabitants any other, greater, or further sum and amount for gas by it delivered for heat and light than the maximum sum or amount or rate fixed by said ordinance of the 6th day of March, 1911, and that said defendant be enjoined to specifically perform said ordinance and franchise contract, and that pending the final hearing of said case, a temporary injunction issue to a like effect, restraining the defendant in like manner and for all
11 other and further relief to which this plaintiff, the city, or any of its inhabitants, may be entitled in equity and good conscience.

FRANK A. BOLTON, *Solicitor.*
JONES & JONES.
FLORY & FLORY,
*Attorneys for the Plaintiff.*

(Duly verified.)

*Ordinance No.* 1318.

The Newark Natural Gas & Fuel Co.

Granting to the Newark Natural Gas & Fuel Company the right and privilege of laying pipes in and through the streets, alleys, avenues, commons, bridges and public grounds and places of the City of Newark, Ohio, for the purpose of conveying and supplying natural gas or fuel gas to the consumers thereof, fixing and regulating the price to be charged therefor for a period of ten years, and repealing an ordinance passed by the City Council of Newark, Ohio, on April 23, 1888, granting to E. H. Everett, and his associates the privilege of using the streets, lanes, etc., of said city for the purpose of laying pipes and conveying through them in said city gas or oil, and regulating the price thereof.

Section 1. Be it ordained by the City Council of Newark, Ohio, that the Newark Natural Gas & Fuel Company, a corporation organized under the laws of Ohio, its successors and assigns, are hereby granted the privilege and invested with the right of using the said streets, lanes, avenues, alleys, bridges, commons and public grounds and places of said city for the term of twenty-five years, for

the purpose of laying pipes to be used for conveying natural
12 gas or fuel gas in and through the said streets, lanes, avenues, alleys, bridges, commons and public grounds and places, for the purpose of laying such pipes and other appliances required to convey said gas to the consumer thereof.

Provided, that all of said pipes and appliances shall be laid in a good workmanlike manner, and said pipes to be of cast or wrought iron.

Provided, further, that all injuries done to said streets, lanes, avenues, alleys, bridges, commons and public grounds and places shall be repaired with due diligence by said The Newark Gas & Fuel Company, its successors and assigns, and said streets, lanes, avenues, alleys, bridges, commons and public grounds and places left in as good condition as before.

Provided, further, that said pipes shall not interfere with the drainage of said city by the necessary construction of sewers and other underground fixtures, for the conveyance of water within said city; nor shall the inhabitants thereof be liable in any damage for the necessary disturbance of said pipes on account of any improvement in the drainage of said streets, alleys, or public lands of said city, or in the construction of any public or private work.

Provided, further, that The Newark Natural Gas & Fuel Company shall preserve and keep said city safe, free and harmless from all damages that may be incurred or happen to persons or property by reason or on account of the rights granted herein.

Provided, further, that whenever a property owner along the line of said gas mains desires the use of natural gas or fuel gas, the said The Newark Natural Gas & Fuel Company, its successors or
13 assigns, shall be required to lay, at its or their own expense, service pipes from their main line to the line of the lot occupied by the consumer.

Provided, further, that the said The Newark Natural Gas & Fuel Company, its successors or assigns, shall within ninety days from the passage and taking effect of this ordinance, accept this grant in writing to the City Council.

The privileges granted by the provisions of this ordinance shall not be forfeited by temporary suspension or operations unless such suspension be for a period of six months or more when the city may declare all privileges and rights herein forfeited.

Section 2. And be it further ordained that for a period of ten years from the passage and taking effect of this ordinance, the said The Newark Natural Gas & Fuel Company, its successors and assigns, shall be entitled to charge for any such gas furnished at the rate of twenty-five (25) cents per one thousand (1,000) cubic feet and for the use of each *of each* meter furnished by said company at the rate of twenty-five (25) cents per month and consumers shall be furnished gas by meter measurement if they so desire and the meters shall be of standard make, and when the consumer has paid in rent an amount equal to the cost of the meter, the same shall belong to the consumer and rent of meter shall cease.

Provided, that said The Newark Natural Gas & Fuel Company, its

successors and assigns, shall, while furnishing gas during said period, furnish without charge natural gas or fuel gas for heating the City Hall, city offices, city prison, fire department, and other city buildings used for city offices only, and parts of buildings occupied by city officers.

14 Provided, further, said The Newark Natural Gas & Fuel Company, its successors and assigns, shall within ninety days from and after the passage and taking effect of this ordinance, except the provisions hereof by written acceptance filed in the office of the clerk of this corporation.

Section 3. Be it further ordained that an ordinance passed by this Council on April 23, 1888, granting to E. H. Everett and his associates the privilege of using the streets, lanes, alleys, and public grounds of said city for the purpose of laying pipes and conveying through them in said city natural gas or oil, and regulating the price thereof, be and the same is hereby repealed.

Section 4. This ordinance shall take effect from and after its passage and publication according to law.

Passed Feb. 21, 1898.

O. B. v. 1, page 253.

DAN L. JONES,
*Pres. of Council.*
C. S. BRADY,
*City Clerk.*

B.

COUNCIL CHAMBER, NEWARK, OHIO,
Monday Evening, Mar. 21, 1898.

Regular meeting, President Jones presiding.

Present: Bourner, Downey, Fristoe, Irwin, Jones, Kuhn, McCrum, Redman, Ritzer, Slanker—10.

Minutes of previous meting read and approved.

*Acceptance of Natural Gas Franchise.*

To the City Council of Newark, Ohio, and to the City of Newark, Ohio:

The Newark Natural Gas & Fuel Company, a corporation organized under the laws of the State of Ohio, for itself and
15 its successors and assigns, accept the provisions of an ordinance of City Council of the City of Newark, Ohio, entitled "An ordinance granting to The Newark Natural Gas & Fuel Company the right and privilege of laying pipes in and through the streets, alleys, avenues, bridges and public grounds and places of the City of Newark, Ohio, for the purpose of conveying and supplying natural gas or fuel gas to the consumers thereof, fixing and regulating the price to be charged therefore for a period of ten years and repealing an ordinance passed by the City Council of Newark, Ohio, on April 23, 1888, granting to E. H. Everetts and his associates the

privilege of using the streets, lanes, etc., of said City for the purpose of laying pipes and conveying through them in said city natural gas or oil, and regulating the price thereof, passed February 21, 1898."

THE NEWARK NATURAL GAS & FUEL CO.,
By E. H. EVERETT, *President,*
By A. P. TAYLOR, *Secretary.*

Newark, Ohio, March 18, 1898.

Adjourned.

DAN L. JONES,
*President of Council.*

Attest:
C. S. BRADY, *City Clerk.*

Vol. 13, p. 524, Council Proceedings.

C.

*Ordinance No.* 2123.

Regulating and fixing the price The Newark Natural Gas & Fuel Company, its successors or assigns, may charge for natural gas for light and fuel in the City of Newark, Ohio.

Be it ordained by the Council of the City of Newark, State
16 of Ohio:

Sec. 1. For a period of five years next ensuing the City of Newark, Ohio, hereby establishes, fixes and regulates the price The Newark Natural Gas and Fuel Company, its successors or assigns, may charge for natural gas for light and fuel to all persons, firms, or corporations using or consuming the same at twenty cents per thousand for each thousand cubic feet of gas used or consumed. Provided, however, such price is subject to a discount of ten per cent for all persons, firms, or corporations paying for the same on or before the tenth day of each month for such natural gas consumed the month previous thereto. The price herein fixed is the maximum said company may charge.

Sec. 2. This ordinance shall take effect and be in force from and after the earliest period allowed by law.

Passed March 6th, 1911.

ELMER ORR,
*Pres. Council.*

Attest:
JAMES McCARTHY, *Clerk.*

Approved by the Mayor this 9th day of March, 1911.

JOHN M. ANKELE, *Mayor.*

I, James McCarthy, Clerk of Council, do hereby certify that the above ordinance was published in the Newark Advocate and the American Tribune, two newspapers of general circulation and opposite politics, published in the City of Newark, Ohio, on the 13th and 29th days of March, 1911.

(Signed) JAMES McCARTHY,
*Clerk of Council.*

17 Court of Common Pleas.

*Amended Answer.*

(Filed July 27, 1911.)

Now comes the defendant The Newark Natural Gas & Fuel Company and for amended answer to plaintiff's petition says: that it admits the averments and allegations stated in the plaintiff's petition from the first to the fourteenth paragraph thereof, both inclusive, which includes all statements from the beginning of said petition to the following phrase: "contrary to the provisions of the ordinance of the 6th day of March, 1911," except that it denies that it threatens or has threatened that the defendant will stop the supply of gas and refuse to furnish to said city or any of its inhabitants who refuse to pay the price fixed by the defendant, and except also that while admitting that said ordinance of March 6, 1911, was passed in due form by the city council of the City of Newark, Ohio, fixing the price that defendant may charge consumers, yet defendant avers that said ordinance is unreasonable; and that the rate fixed denies to this defendant any adequate profit for the five years next ensuing and operates as a fraud upon the property rights of the defendant, and is therefore unreasonable and void. And said defendant further answering denies each and every averment in plaintiff's petition contained, and not herein expressly admitted to be true.

Second Defense.

And for second defense and further answering the defendant says, that the said ordinance of March 6, 1911, is contrary
18 to and in violation of section one article one of the Bill of Rights of the Constitution of the State of Ohio and is therefore null and void for the reason that said alleged ordinance is violative and a denial of the due possession and protection of the property of this defendant without its consent.

Third Defense.

And for a third defense the said defendant says that said alleged ordinance of March 6, 1911, is contrary to and in violation of section 19 of article 1 of the Bill of Rights of the Constitution of the State of Ohio and is therefore null and void and of no effect for the reason that it is the taking of private property without due

process of law in that said ordinance attempts to compel the defendant Company to furnish gas at a price without just compensation or profit and without any equivalent or just compensation in money and against and without the consent of the defendant herein.

Fourth Defense.

And for a fourth defense the said defendant says: That said alleged ordinance of March 6, 1911, is contrary to and in violation of Sec. 1 article 14 of the amendments to the Constitution of the United States and is therefore null and void and of no effect for that it is the denial to this defendant of the equal protection of the laws and without due process of law in this: That it attempts and is designed to compel said defendant Company to furnish gas for a period and at a price without adequate return, compensation or profit, and without the consent of the defendant herein.

Said defendant therefore prays, that the temporary restraining order herein granted may be dissolved, and the prayer of
19 the petition be denied, and the said ordinance of March 6, 1911, be declared unreasonable, null and void, and for all other proper relief in the premises.

S. M. DOUGLAS AND
FITZGIBBON & MONTGOMERY,
*Attorneys for The Newark Natural Gas and Fuel Company.*

(Duly verified.)

Court of Common Pleas.

*Reply.*

(Filed Oct. 14, 1911.)

Now comes the plaintiff and for reply to the first defense of the amended answer of the defendant denies that said ordinance is unreasonable. Plaintiff further denies that the rate fixed denies to the defendant any adequate profit for the five years next ensuing and operates as a fraud upon the property rights of the defendant and is therefore unreasonable and void.

For reply to the second defense of the amended answer of said defendant, the plaintiff denies each and all of the allegations therein contained.

For reply to the third defense of the amended answer of said defendant the plaintiff denies each and all of the allegations therein contained.

For reply to the fourth defense of the amended answer of the defendant the plaintiff denies each and all of the allegations therein contained.

20 Wherefore said plaintiff prays judgment.

FRANK A. BOLTON, *Solicitor.*

(Duly verified.)

## Common Pleas Court.

### *Journal and Docket Entries.*

April 25, 1911. Petition and copy filed.
April 29, 1911. Precipe filed.
April 29, 1911. Summons issued to Sheriff of Licking County, Ohio, for defendant.
May 8, 1911. Return day of summons.
May 27, 1911. Answer day of summons.
April 27, 1911. Injunction bond filed. (Vol. 1, pg. 354.)
April 27, 1911. Justification of surety taken and filed.
April 29, 1911. Sheriff's return filed to-wit: State of Ohio, Licking County, ss. Received this writ April 28 A. D. 1911 at 10 o'clock A. M., and on the 28th day of April A. D. 1911, I served the same by personally handing a true copy thereof, with all the endorsements thereon, to Louis F. Carl, Managing agent of The Newark Natural Gas and Fuel Company, neither the President nor any of the Board of Directors or Secretary or Treasurer could be found in the county. Frank E. Slaubaugh, Sheriff.
May 6, 1911. Motion filed.
May 6, 1911. Answer and copy filed.
June 2, 1911. Receiver's bond filed.
21 June 7, 1911. Motion and copy filed.
June 7, 1911. Brief in support of motion filed.
July 6, 1911. Proof of Publication filed.
July 27, 1911. Amended Answer and copy filed.
Aug. 26, 1911. Demurrer to Amended Answer and copy filed.
Aug. 26, 1911. Brief on Demurrer to the Amended Answer filed.
Sept. 11, 1911. Depositions filed.
Sept. 21, 1911. Depositions on behalf of plaintiff filed.
Oct. 14, 1911. Reply and copy filed.
Oct. 23, 1911. Depositions filed.
Nov. 16, 1911. Depositions filed.
Nov. 30, 1911. Depositions on behalf of plaintiff filed.
Feb. 24, 1912. Receiver's bond filed. (American Surety Co.)
Feb. 26, 1912. Receiver's bond filed. (Maryland Casualty Co.)
April 17, 1912. Receiver's bond filed.
Dec. 17, 1912. Receiver's bond filed.
March 7, 1913. Proof of Publication filed.
April 7, 1913. Full and complete transcript of testimony filed by stenographer, 732 pages.
April 12, 1913. Certificate of fees issued to C. C. Cooper, Stenographer.
Aug. 1st, 1913. Opinion of court. Judge Jewell filed.
Aug. 4, 1913. Appeal bond accept- & filed. Vol. 1, pg. 231.
Aug. 9, 1913. Appeal bond re-filed.
Aug. 14, 1913. Second appeal bond filed.

And afterwards to-wit at the April Term, 1911, on the 28th day of April A. D. 1911 the following proceedings were had to-wit:

On this 26th day of April A. D. 1911, came the parties and thereupon on motion to the court, a temporary injunction is allowed in this case, enjoining the defendant from charging a higher rate for natural gas furnished to the city of Newark and the inhabitants thereof, than the rate said defendants has been charging to said city and its inhabitants, and which rate was fixed in the ordinance dated March 6th, 1911, and approved by the Mayor on March 9th, 1911, until the further hearing of this action, and that the plaintiff give an injunction bond to the defendant in the sum of Three Thousand Dollars, conditioned according to law and with surety to the approval of the Clerk of this court.

And afterwards to-wit at the April Term, A. D. 1911 on the 23rd day of May, A. D. 1911 the following proceedings were had to-wit:

This day by consent of parties, the temporary restraining order heretofore issued herein is modified as follows:

It is ordered that the defendant be and it is enjoined from collecting any other or further sum not exceeding the amount of 25 cents per thousand, less the 10% discount as mentioned in the petition for gas furnished for fuel and light to the City of Newark and any of its inhabitants than twenty cents per thousand *per* cubic feet, subject to the ten per cent discount if paid on or before the tenth day of the month following each meter reading

23 unless said defendant company, on or before the twentieth day of the month in which said collections are made, pay over to a receiver to be appointed by this court in this cause, the excess charges so collected over and above said twenty cent rate less discount as above mentioned together with a list of the names and addresses of the persons so paying said excess charges and the amount thereof so paid by each such person, to be held by said receiver, pending the final disposition of this case and the final orders of this court; that Walter C. Metz is hereby appointed receiver for said purpose and ordered to give bond in the sum of $10,000.00, said bond to be increased so as to at all times equal the whole amount of money in the hands of the receiver.

It is further ordered that the bond ordered as a preliminary condition to the temporary injunction in this cause, be reduced this day to one hundred dollars.

And afterwards to-wit at the April Term, 1911 on the 27th day of July, A. D. 1911 the following proceedings were had to-wit:

This day this cause came on to be heard upon the motion of the plaintiff filed June 7th, 1911 to the answer of the defendant herein. On consideration thereof, the court finds that the second and sixth branches of said motion should be sustained, and that the said

part of said answer, mentioned in said second branch of said motion, and the second defense in said answer, as mentioned in said sixth branch of said motion, be, and the same are hereby stricken from said answer. The court further finds that part of the third, fourth and fifth defenses of said answer which adopts all of the averments of the second defense as fully as if therein written,
24 should be and the same is hereby stricken from said answer.
To all of which finding and judgment of the court the defendant hereby excepts.

The court further finds that each and all of the other branches of said motion are not well taken and the same and each of them is hereby overruled. To which finding and judgment of the court overruling each of said other branches of said motion, the plaintiff excepts.

Thereupon, on motion of the defendant, leave is granted to file within thirty days its amended answer herein, so as to comply with the order of the court herein.

April Term, 1911. Continued.

And afterwards to-wit at the September Term, A. D. 1911 on the 28th day of September, A. D. 1911 the following proceedings were had to-wit:

This day this cause came on for hearing upon the demurrer filed August 26, 1911 to the second and third defenses of the amended answer. The court upon consideration finds that neither of said demurrers is well taken and that they should be overruled and said demurrers to said second and third defenses are overruled, to which plaintiff excepts. Upon application of plaintiff leave is given it to reply in 20 days from date.

September Term, 1911. Continued.

And afterwards to-wit at the January Term, A. D. 1912 on the 24th day of February, A. D. 1912 the following proceedings were had to-wit:

25 This day upon application of the defendant and it appearing to the court that the funds in the receiver's hands are largely in excess of the bond heretofore given by him, the court ordered that the receiver, within five days increase the amount of his bond $20,000.00 making the bond of said receiver amount in the aggregate to the sum of $30,000.00.

January Term, 1912. Continued.
April Term, 1912. Continued.
September Term, 1912. Continued.

And afterwards to-wit at the January Term, 1913 on the 19th day of February, A. D. 1913, the following proceedings were had to-wit:

Counsel for both parties requests services of official stenographer; court grants same and appoints C. C. Cooper.

And afterwards to-wit at the January Term, 1913 on the 26th day of February, A. D. 1913, the following proceedings were had to-wit:

This day on application of the plaintiff it is ordered that the receiver heretofore appointed in this case W. C. Metz allow J. Hope Sutor expert accountant for the plaintiff to examine all the books, papers and accounts of said receiver.

January Term, 1913. Continued.

And afterwards to-wit at the April Term, A. D. 1913 on the 10th day of April, A. D. 1913 the following proceedings were had to-wit:

Ordered that court stenographer make for the court transcript of stenographic notes taken on trial of above case in the Court of Common Pleas. G. C. 1552.

26 And afterwards to-wit at the April Term, A. D. 1911 on the —— day of Aug. A. D. 1911, the following proceedings were had to-wit:

This 5th day of August, A. D. 1913 this cause came on to be heard on the pleadings and the evidence and was argued by counsel, and the court being advised in the premises finds that the allegations of the petition and reply are true and that the allegations of the answer so far as they are inconsistent with the allegations of the petition and reply are not true, and that the equity of the case is with the plaintiff. Whereupon it is ordered, adjudged and decreed that the defendant be perpetually enjoined from charging, collecting or attempting in any way to collect from the City of Newark or any of the inhabitants, any other or further sum or amount for gas furnished or delivered for heat and light than the maximum sum or amount or rate fixed by the ordinance of said City passed March 6, 1911 and to pay the costs of this action, taxed at $— and that the receiver, Walter C. Metz heretofore appointed in this action, repay within thirty days of this date to such inhabitants of the City of Newark, who have since May 11, 1911 paid to the defendant any further sum for gas furnished to them by the defendant than the rates fixed by the ordinance aforesaid, the said further sum so by each of said inhabitants paid, to all of which the said defendant excepts.

This finding and decree of the court is made however without prejudice to the right of the defendant, Company, at any time to apply to a court of competent jurisdiction to modify said finding if at any time it should appear that said rate of 18¢ net does

27 not render an adequate return to said defendant company.

And thereupon a motion for new trial on behalf of said defendant was overruled and thereupon at the request of said defendant the court fixed a bond for appeal at $500.00.

(Duly certified.)

Court of Appeals.

*Bill of Exceptions.*

Be it remembered, that heretofore, to-wit: At the March Term, A. D. 1914, of the Court of Appeals, within and for Licking County, Ohio, before Judges Hon. R. M. Voorhees, Hon. R. S. Shields and L. K. Powell, this cause came on for trial:

Whereupon, the plaintiff, by counsel, to maintain the issues upon its part, introduced and read in evidence all of the evidence that was given on the trial of this cause in the Court of Common Pleas on behalf of the plaintiff; and also offered and read in evidence an ordinance of the City of Newark, Ohio, as found in the Ordinance Book of said City, at pages 224, 225 and 226, which said ordinance was passed February 21, 1898.

The defendant, to maintain the issues upon its part, offered and read in evidence all the evidence offered by the defendant on the trial of this case in the Court of Common Pleas.

A full and complete transcript of verbatim stenographic notes of said testimony and evidence given on the trial in the Court
28 of Common Pleas is hereto attached, marked "AA" and made part hereof. True copies of the exhibits offered in evidence on said trial in said Court of Common Pleas are also attached to said transcript and made part thereof, and of this record.

A true copy of said ordinance heretofore offered in evidence by the plaintiff, as found in the Ordinance Book of the City of Newark at pages 224, 225 and 226, made part hereof, is as follows:

*"Ordinance No.* 1318."

"The Newark Natural Gas & Fuel Company.

"Granting to the Newark Natural Gas & Fuel Company the right and privilege of laying pipes in and through the streets, alleys, avenues, commons, bridges and public grounds and places of the City of Newark, Ohio, for the purpose of conveying and supplying natural gas or fuel gas to the consumers thereof, fixing and regulating the price to be charged therefor for a period of ten years, and repealing an ordinance passed by the City Council of Newark, Ohio, on April 23, 1888, granting to E. H. Everett and his associates the privilege of using the streets, lanes, etc., of said city for the purpose of laying pipes and conveying through them in said city gas or oil and regulating the price thereof.

"Section 1. Be it ordained by the City Council of Newark, Ohio, that the Newark Natural Gas and Fuel Company, a corporation organized under the laws of Ohio, its successors and assigns, are hereby granted the privilege and invested with the right of using the said

streets, lanes, avenues, alleys, bridges, commons and pub-
29 lic grounds and places of said city, for the term of twenty-five years, for the purpose of laying pipes to be used for conveying natural gas or fuel gas in and through the said streets, lanes, avenues, alleys, bridges, commons, and public grounds and places, for the purpose of laying such pipes and other appliances required to convey said gas to the consumer thereof.

"Provided, that all of said pipes and appliances shall be laid in a good workmanlike manner, and said pipes to be of cast or wrought iron.

"Provided, further, that all injuries done to said streets, lanes, avenues, alleys, bridges, commons and public grounds and places shall be repaired with due diligence by said The Newark Natural Gas & Fuel Company, its successors and assigns, and said streets, lanes, avenues, alleys, bridges, commons and public grounds and places left in as good condition as before.

"Provided further, that said pipes shall not interfere with the drainage of said city by the necessary construction of sewers, and other underground fixtures, for the conveyance of water within said city; nor shall the inhabitants thereof be liable in any damage for the necessary disturbance of said pipes on account of any improvement in the drainage of said streets, alleys, or public lands of said city, or in the construction of any public or private work.

"Provided further, that The Newark Natural Gas & Fuel Company shall preserve and keep said city safe, free and harmless from all damages that may be incurred or happen to persons or property by reason or on account of the rights granted herein.

30 "Provided, further, that whenever a property owner along the line of said gas mains desires the use of natural gas or fuel gas, the said The Newark Natural Gas & Fuel Company, its successors or assigns, shall be required to lay at its or their own expense service pipes from their main line to the line of the lot occupied by the consumer.

"Provided, further, that the said The Newark Natural Gas & Fuel Company, its successors or assigns, shall within ninety days from the passage and taking effect of this ordinance, accept this grant in writing to the City Council.

"The privileges granted by the provisions of this ordinance shall not be forfeited by temporary suspension of operations unless such suspension be for a period of six months or more, when the city may declare all privileges and rights herein forfeited.

"Section 2. And be it further ordained that for a period of ten years from the passage and taking effect of this ordinance, the said The Newark Natural Gas & Fuel Company, its successors and assigns, shall be entitled to charge for any such gas furnished at the rate of twenty-five (25) cents per one thousand (1000) cubic feet and for the use of each meter furnished by said company at the rate of twenty-five (25) cents per month, and consumers shall be furnished gas by meter measurement if they so desire and the meters shall be of standard make, and when the consumer has paid

in rent an amount equal to the cost of the meter, the same shall belong to the consumer, and rent of meter shall cease.

"Provided, that said The Newark Natural Gas & Fuel Company, its successors and assigns, shall, while furnishing gas during said period, furnish without charge, natural gas or fuel gas for
31 heating the city hall, city offices, city prison, fire department, and other city buildings used for city offices only, and parts of buildings occupied by city officers.

"Provided, further, said The Newark Natural Gas & Fuel Company, its successors and assigns, shall within ninety days from and after the passage and taking effect of this ordinance, accept the provisions hereof by written acceptance filed in the office of the clerk of this corporation.

"Section 3. Be it further ordained that an ordinance passed by this Council on April 23, 1888, granting to E. H. Everett and his associates the privilege of using the streets, lanes, alleys, and public grounds of said city for the purpose of laying pipes and conveying through them in said city natural gas or oil, and regulating the price thereof, be and the same is hereby repealed.

"Section 4. This ordinance shall take effect from and after its passage and publication according to law.

DAN L. JONES,
*President of Council.*

C. S. BRADY, *City Clerk.*

Passed February 21, 1898."

Whereupon, the following proceedings were had:

By Judge S. M. Douglass: We wish to preserve our exceptions to a ruling upon the original answer. A motion was filed directed to the original answer, as to certain averments therein, which motion was sustained. We desire to save that exception.

And also respecting a ruling of the Court below on page-
32 190 and 191, excluding certain questions. Certain questions were propounded hypothetically to an expert witness as to what would be the reasonable and proper cost of the production, transportation, and distribution of natural gas, during the period covered by the ordinance of March 6, 1911, including a period of five future years. This, the court below, after consideration, excluded. The court excluded the evidence of two or three witnesses upon that point, and we desire to preserve our exceptions.

Thereupon, exceptions were allowed by the Court of Appeals on behalf of defendant as to each of said rulings of the Court of Common Pleas.

Thereupon, the defendant, to further maintain the issues upon its part, introduced the following witnesses:

SAMUEL S. WYER, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. You are the same Samuel S. Wyer, who testified at the trial of this case in the Court of Common Pleas and whose testimony is found from page 42 to 145 inclusive of the record?

A. I am.

Q. You are a consulting engineer, are you not?

A. I am.

Q. Have you any specialty?

A. The value of public utility properties.

33 Q. Have you made a valuation for rate making purposes of the plant of the Newark Natural Gas & Fuel Company?

A. I have.

By Judge Douglass: His qualifications are in the record.

By Edward Kibler: Yes, sir, they are in the record.

By J. R. Fitzgibbon: That is the reason I called attention to the record—so as to dispense with that.

Q. What factors were considered by you in determining the valuation of the Newark plant? What items?

A. I at first made a careful inventory of the property and then found the total cost of the naked physical property. To that I added the intangible property, which is an integral part of the physical property. That gave the total reproduction cost. Then from that I made an allowance for depreciation. That gave us the value of the plant at the present time. By studying the records we were also able to find what the value of the plant was as of the date when the ordinance would have become effective. Then, to that value of the plant at the present time, we added the cost of developing the business, which is controlled by various items, of which the going value is one; and then to that we added the amount of material in stock, so as to get the total present value of the property, as of April 1, 1914, which is substantially the same as the value of the property as of April 1, 1911. And then we made an allowance for working capital and that gives the total value for rate making purposes, which total value——

34 By Edward Kibler (interrupting): I object to that. I think the courts have held just exactly what is entitled to be estimated as the value of the plant. He is going altogether outside of what the law recognizes as the elements constituting the value for fixing the rate.

The Court: We will overrule your objection and we will receive the evidence under objection.

The Witness: Just read the last part of my answer.

(The stenographer read the concluding portion of the witness' answer as requested.)

The Witness: It is round numbers $542,000.
By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

Q. I will ask you, Mr. Wyer, whether that valuation is of the date of the passage of this ordinance.

A. In arriving at that we made the valuation at the present time and then studied the extension account, which represents the extensions which have been made since the passage of the ordinance, and then as near as we could estimate the value of the plant as of
35 today, which is substantially the value as of April 1, 1911, and which would be substantially the value as of the date of the passage of the ordinance.

By Mr. J. R. Fitzgibbon: You *make* take the witness.

SAMUEL S. WYER.

Cross-examination.

Examined by Frank A. Bolton:

Q. You are in the employ of the Ohio Gas Association, are you not?
A. Not now.
Q. You have been?
A. I have.
Q. You are consulting engineer of the Logan Natural Gas and Fuel Company, are you not?
A. Yes, sir.
Q. And have been acting in such capacity for the Logan Natural Gas and Fuel Company in rate making cases other than this?
A. This is the only rate case they have had.
Q. Well, in rate matters, outside of cases, you have been consulted?
A. Yes, sir.
Q. How long have you been employed by the Logan Natural Gas and Fuel Company?
A. About a year and a half.
Q. How long were you employed as consulting engineer for the Ohio Gas Association?
A. About one year.
Q. Were you employed by any other gas company other than the Logan and the Ohio Gas Association?
A. I am employed regularly, as I receive a regular retaining fee from the Ohio Fuel Supply Company for similar services; and I rendered similar services for the United States District
36 Court in Oklahoma, in valuing the property of the Kansas Gas Company.
Q. You are one of the gentlemen who made the recommendation to the City of Columbus of a thirty cent rate, are you not?
A. Yes, sir.

Q. And at the same time, gas was being furnished to Columbus at wholesale to the Columbus Gas Company at ten cents at the time when that recommendation was made. Isn't that so?

A. I have no knowledge as to the price.

Q. Well, don't you know that?

A. I have heard that that was the statement, but I have no knowledge of it.

Q. What was the total amount of the investment of the Newark Natural Gas and Fuel Company as of the 1st of January, 1899?

A. I don't have that. I made the valuation as of April 1st, this year, and then corrected it in order to get the approximate valuation as of April 1, 1911.

Q. Do you know what the amount of the investment of the Newark Natural Gas and Fuel Company was on the 1st of January, 1911?

By J. R. Fitzgibbon: I object to that.

A. I know nothing about the history of the company.

By J. R. Fitzgibbon: It is not the amount of the investment, but the reproduction value of the plant. It is what the value of the plant was when the rate was made. These people might have invested two million dollars, but when the ordinance was passed, the plant was only worth half a million, and the rate would be based upon the value of the plant and not upon the investment.

37 By Frank A. Bolton: Read the question.

(The stenographer read the question.)

A. I know nothing of the past history of the company.

Q. Did you take into consideration the investment of the company at all?

A. I simply——

Q. (Interrupting.) Did you take into consideration when you investigated the property of the Newark Natural Gas and Fuel Company, the investment of the company?

A. I made an appraisal of the entire property, and I paid no attention to first cost, purchase-price from former owners, outstanding securities, or any of the past history of the company.

By Frank A. Bolton: Read the question.

(The stenographer read the question.)

By Frank A. Bolton: He didn't answer it.

By J. R. Fitzgibbon: We think he did.

The Court: We think he answered it properly.

By Edward Kibler: He is trying to dodge, is the trouble.

By J. R. Fitzgibbon: But, if your Honors please——

The Court: That is not proper.

By Edward Kibler: We think he could have answered that question directly.

38 The Court: Proceed with the examination.

Q. Now, Mr. Wyer, your estimate was upon the reproduction theory—as to the value of the plant on April 1, 1911?

A. That is the criterion established in finding the present value of the property.

Q. I will ask you if your theory of the value of the plant was upon the reproduction theory?

A. It was.

Q. And that was of April 1, 1911?

A. Yes, sir, and April, 1914.

Q. How old is this plant, Mr. Wyer?

A. Parts of it have been in use twenty-five years.

Q. Do you know what the life of the different parts of this plant is?

A. They will vary largely.

Q. Well, do you know what the life is, or what it has been of this plant—the different parts of it?

A. I made a very careful study here about a year and a half ago in another case in determining the depreciation of the plant due to electrolysis from the street railway. And I used that information that I had in arriving at the correct depreciation of this plant at the present time.

Q. What did you place the physical property at?

A. The total reproduction cost, $356,708.

Q. Do you mean that the plant could be produced in its entirety as a plant?

A. The physical plant could, but you couldn't build the plant without incurring the overhead charges which are an integral part of the physical plant.

Q. The physical plant could be built, according to your statement, at a cost of approximately $350,000?

39 A. By adding the cost of the intangible or overhead charges. You cannot build the plant without incurring those overhead charges.

Q. Now, Mr. Wyer, after you have the physical value of the plant, what other factors do you claim enter into the intangible value of the plant?

A. For the promotion; legal——

Q. (Interrupting.) As to the promotion——

A. (Interrupting.) I have not finished the answer. For the promotion, legal, organization, superintendency, contingent, interest during construction, taxes during construction. We took twenty per cent of the aggregate of the items going in to make up the total physical property, and which total is $71,342. That gives the total reproduction cost of the plant as $428,050.

Q. Mr. Wyer, you have allowed for promotion and organization of the corporation—how much did you allow for that?

A. I made no separation. I simply studied a large number of rate cases and found what allowance had been made in other rate cases for the same items, and then, by studying the local conditions, using my own judgment, considering hazard in building the plant, and estimated that under the conditions in Newark—20% would be a fair factor to use in this particular case.

Q. This intangible element as you call it—isn't that largely a matter of speculation?

A. It is not. It is just as much a part of the cost as a piece of pipe in the street, and every court that has gone into the details of the rate problem has been careful to make that distinction. The overhead charges have been uniformly *been* allowed by the
40 commissions and by the courts which have made a specialty of studying rate cases.

By Edward Kibler: I object and move to rule out the last answer—about what the courts have ruled.

By Frank A. Bolton: The Supreme Court ruled to the contrary.

The Witness: The Supreme Court did not rule to the contrary.

Q. You say that these charges which you call overhead charges, or intangible charges, are not speculative, but are really substantial values to be added to the property?

A. Yes, sir.

Q. As a matter of fact, you don't know that any one of those additional items of value were used in this particular instance do you?

A. I know that no public utility property could be bilt without——

Q. (Interrupting.) Well, answer the question.

The Court: Read the question.

(The stenographer read the question.)

A. I know that a plant could not be built without incurring——

By Edward Kibler: I move to rule that out.

The Court: That is arguing——

A. I know that they have been incurred. Is that satisfactory?

41 Q. How much was incurred in the promotion of this plant?

A. I have simply made a blanket allowance. There is no opportunity, in going back over the records, to find out exactly what the early history was. When you are unable to find out early history of the plant, the appraiser must then use his judgment as to what is a fair allowance for some of these items.

Q. Then you don't know what was spent for promotion?

A. Not as a separate item.

Q. How much was spent as a legal expense?

A. I know nothing about the early history of the company.

Q. Do you know what was spent in the way of an organization expense?

A. Not specifically.

Q. Or, in superintendent?

A. No, sir.

Q. Or interest?

A. No, sir.

Q. Or for taxes?

A. No, sir.

Q. Now, Mr. Wyer, you claim that the value that you placed

upon the plant of $350,000, approximately, was on the reproduction basis on April 1, 1911. That is your idea, is it?

A. State the amount again.

Q. $350,000, approximately—the tangible property.

A. The total physical property was $356,708. I presume that that is the figure that you are referring to.

Q. That is on the reproduction theory?

A. Yes, sir.

Q. You didn't go back into the early history of the company and make any allowance for the depreciation of the plant from the time of its organization, or from the time it was started up until April 1, 1911, did you?

A. I did.

42 Q. How much did you allow for depreciation per year?

A. I didn't make a separate allowance by the year, for the reason that the early history of the company was not available. Knowing the physical condition of the property, by means of prior study, for another case, I estimated that the present value of the property was 80% of the reproduction cost, new; that is, on account of the various species of depreciation—that the property was worth 20% less than new property would be worth.

Q. As a matter of fact, Mr. Wyer, all good engineers recognize that there is a proper amount to be allowed for annual depreciation. Is that not so?

A. That is true.

Q. And you didn't do that in this instance, did you?

A. I simply made one allowance to cover——

Q. (Interrupting.) I would like to have you answer the question.

The Court: We think he is answering properly.

The Witness: I made an allowance that covers all the different factors. It is impossible to separate all the items that enter into the plant. You cannot uncover all the mains and examine them, and examine all the meters in the town; and it is necessary to use some factor that will be fair and apply it to the property as a whole; and which is what I did in this particular case.

Q. What is the usual amount allowed by engineers, Mr. Wyer, for the annual depreciation of a natural gas plant?

A. That will depend upon the class of property you are referring to.

43 Q. Well, I am referring to a distributing property.

A. The range of depreciation will vary very largely. The mains depreciate slowly; the meters depreciate very much faster.

Q. What is the highest and lowest depreciation allowance?

A. The mains will last anywhere from a few years up to forty or fifty years, judging from experience in similar lines of construction of water works plants. Of course, we have no data available at the present time as to natural gas plants where they have been in a large number of years. But the materials used are to a large extent similar to the materials used in water works plants and artificial gas plants; and from those plants we get a basis upon which to base

the depreciation of the various elements entering into natural gas property; but that will vary for the different kinds of property. The mains will have the longest life and the meters perhaps the shortest.

Q. Well, I would like to have my question answered.

The Court: We think he has answered it.

By Frank A. Bolton: I would like to know the amount of the annual depreciation of a natural gas plant.

The Court: Well, if you have anything further to say——

A. (Interrupting.) I haven't anything further to say.

Q. Mr. Wyer, I would like to have you tell me if you know what good engineers allow as an annual depreciation for natural gas plants.

A. No one knows definitely what the depreciation is for the different classes of material.

44 The Court: Why do you put in the question "good engineers?"

By Frank A. Bolton: Well, what is accepted as a standard? The standard as to what is allowed for an annual depreciation charge.

The Court: Well, why don't you say "skilled engineers?"

By Frank A. Bolton: Well, that is another way of putting it.

Read the question, using the words "skilled engineers."

(The stenographer read the question, as directed using the words "skilled engineers" in place of the words "good engineers.")

The Witness: The figure that I have used, namely: 80% on this plant represents the very best practice; of course, first making a careful study of the conditions so that you know what the conditions of the plant are. If the plant had been properly maintained from the start, the depreciation would have been less. If it had been maintained poorer than this was, then the depreciation would be more.

By Frank A. Bolton: The question that I asked is what a skilled engineer would allow as an anuual depreciation charge upon a natural gas property, if you know.

The Court: If you know, you may answer the question.

45 A. The factor that I have used would represent what any skilled engineer would apply to this property, after having made a study of the conditions.

Q. If you know the annual charge for depreciation, we would like to have it.

A. It would be very unusual, in a case like this, to put it upon a per annum basis.

Q. Now, Mr. Wyer, in considering your estimate of the tangible property of this plant, in the City of Newark, what different items were taken into consideration?

A. The real estate——

Q. (Interrupting.) What real estate?

The Court: Well, why not let him go on? He says: The real estate.

By Mr. Bolton: All right.

The Witness: Do you want an itemized statement? I have a report here that I can give you which will give that in detail.

The Court: Well, first, the real estate.

A. Yes, sir.

The Court: What is next?

A. In one case, I have it in detail, and in the other case I have it summarized. I will read the summary first. Real estate; low pressure gas mains; medium pressure gas mains; high pressure gas mains; gate valves; regulators and regulator fittings; services; meters; shop and tools; vehicles; office equipment, pavement over mains. Twelve items.

46 Q. In considering the cost of the reprduction of this plant, did you take into consideration the fact that these pipes mostly were all laid in the streets before they were paved?

A. It was impossible to find out about that exactly—what per cent of the mains were laid prior to the time when the pavements were placed over the mains. The value of the property as of today is the value as represented by what it would cost to build a competing plant on these same streets; and therefore, in applying the reproduction method in ascertaining the value of the plant, it would be necessary to cut through those mains, although not all of the present mains were cut through by the present company.

Q. Did you consider, upon the reproduction basis, the digging up of the paved streets in order to reproduce this plant?

A. That is the item covered by "pavement over mains."

Q. Well, I asked you if you considered it.

A. I did.

Q. You don't know, as a matter of fact, how much of this gas plant was put in prior to the laying of the paved streets, do you?

By J. R. Fitzgibbon: That question has been answered.

By Frank A. Bolton: I want to get that thoroughly in my own mind.

The Court: Well, he may answer it again.

A. I did not.

Q. How much did you allow on account of paving?

A. A total of $33,379.

47 Q. How much did you allow for office equipment?

A. $2,209.

Q. How much did you allow for tools?

A. That is in with the shop equipment—$600.

Q. How much did you allow for vehicles?

A. $1961.

Q. What do those vehicles consist of?

A. One bicycle, one 1-ton service motor truck; solid tires; gasoline engine, long body, with top; one platform spring wagon; one top buggy with extension body at rear; one single buggy harness; one single wagon harness; and one bay horse.

Q. What did you allow for shop?
A. There is no separation as between shop and tools.
Q. What did you allow for meters?
A. $47,887.
Q. Where did you get your information concerning the meters?
—. From the company's records, as far as the number and different sizes of meters now installed.
Q. How far back into the history of the company did you go to ascertain the value of the meters?
A. I paid no attention at all to the past history of the company. I made the appraisal as of the present time, without any attention to the early history of the company, book costs, or any of the other records.
Q. How many meters are there?
A. 5131, as of April 1st.
Q. That is, there are that many consumers of gas in the City of Newark?
A. There are that many meters.
Q. Well, are there that many consumers?
A. Not necessarily the same number. I didn't take the number of consumers.
48 Q. Are there more than that?
A. There may be more consumers and there may be less.
Q. Don't you know that a great many of the meters belong to the consumers themselves, and were paid for by them?
A. I don't know that.
Q. You didn't take that into consideration, did you?
A. I knew nothing of that.
Q. How many services did you find?
A. There are 6484 service connections.
Q. What was the allowance per connection?
A. The part that the company paid for was taken from the records. A careful study was made of the service record, and from that we determined the total length of each different size, and found that the average length of the one inch service is twenty-seven feet, and an allowance was made of twenty five cents a foot. The average length of the one and one-quarter inch service was twenty-four feet, and an allowance was made of 26¢ a foot. The inch and a half service, the average length was 31 feet, and an allowance was made 28¢ per foot. The average length of the two inch service was forty-one feet, and an allowance was made 32¢ per foot. The average length of the two and a half inch service was eleven feet, and an allowance was made of 37¢ a foot. The three inch service—the average length was 51 feet, and an allowance was made of 40¢ a foot.
By Edward Kibler: What is the total?
A. $45,111.
Q. What price did you allow, Mr. Wyer, for the half inch pipe?
A. There is no half-inch in this line.
49 Q. What is the smallest that is used?
A. One inch.
Q. What price did you allow for the one inch?

A. I made no separation between the price and the labor, but I simply put the two in together.

Q. What did you put the one inch in at in connection with the labor?

A. Twenty-five cents.

Q. That is the labor included?

A. Yes, sir.

Q. What is the next larger pipe?

A. I will read the preceding statement so as to make the record clear on this: The services vary as shown. The unit prices given include not only the labor, but the pipe, and all fitttings used in connection with the service, as well as recognition of the fact that the majority of these services have been installed on a piecemeal basis, which makes them more expensive, and many of them have been laid by cutting through pavements.

Q. How many?

A. No one can tell the exact amount.

Q. How did you make an estimate of it?

A. By studying other appraisals which have been made, where the records were available to establish that fact.

Q. What do you mean by other appraisals?

A. Other appraisals of similar properties.

Q. That would be owing to the amount of pavement which you would encounter, wouldn't it?

A. It would vary with the local conditions.

Q. What did you allow for real estate?

A. $425.

Q. How much for the low pressure gas lines?

A. $123.898.

Q. How much was there?

A. 375 feet of twelve inch, 350 feet of ten inch, 1850 feet of eight inch, 32,125 feet of six inch, 3,575 feet of five
50 and ⅝ inch, 6,000 feet of five inch, 32,774 feet of four inch, 108.002 feet of three inch, 1,675 feet of two and ½ inch, 100,211 feet of two inch, and 125 feet of one and ½ inch.

Q. What price did you allow for the different sizes of pipe?

A. For the twelve inch, for labor and material, $1.60 per foot.

Q. How was that divided?

A. No separation was made. That represents a fair unit price.

Q. What was the price of the pipe?

A. I made no separation. I happen to know, from other appraisals, that $1.60 represents a fair average unit price for material and labor, but I made no separation in this case. I just recently finished three valuations—two in Indiana and one in Illinois for the Utility Commissions, and in those cases I had an opportunity to go into the details carefully,and we found that the unit prices that I used here was fair, and the conditions were similar. I don't try to go into and analyze and make a fine-haired separation. I simply took the unit prices which were found to be fair in other cases and which would be fair in this case.

Q. In considering the $1.60 price, that you fixed, did you con-

sider the price of the pipe and labor as of today, or the time it was put down?

A. As of today.

Q. You don't know what the price of pipe is today, do you?

A. Yes, sir, I can give it to you. (Witness gets memorandum.)

The Court: The question is what?

By Frank A. Bolton: What he allowed for the price of pipe.

51 The Court: Now?

By Frank A. Bolton: Yes, sir.

A. I have from eight inch down, but the others are not in my notes.

Q. You don't know what you did allow for the prices of the pipe?

A. In the other cases, where we determined that $1.60 was a fair price for twelve inch, all those factors were taken into consideration. I knew the exact price when I fixed that value at $1.60, but I cannot give that from the memorandum that I have now.

Q. What did you allow for labor?

A. We made a careful analysis in those valuations of all those factors. I made a careful analysis of all the factors entering into that. First, the cost of the pipe at the mill. Second, the transportation of the pipe; the unloading and hauling of it and the trenching and labor of laying it and cost of refilling the trenches and that gave the unit figures used in this appraisal. But I don't have those detail figures with me today. But the unit prices that I have used here were fair ones considering all the conditions.

Q. Can you furnish the details of your estimate upon the different sizes of pipe?

A. I could at a later date.

Q. How much time would it take to get those details?

A. I can furnish them tomorrow morning.

Q. Now, Mr. Wyer, will you tell us how much low pressure pipe?

A. 3,375 feet of ten inch pipe; 12,225 feet of six inch pipe; 33,525 feet of four inch pipe; 12,250 feet of three inch pipe;

52 5,775 feet of two inch pipe, and 900 feet of one inch pipe.

Q. Where did you get those figures?

A. From the company's map.

Q. You didn't make any actual investigation of the amount of pipe in the streets, did you?

A. I took the company's inventory. I took the company's figures.

Q. You made no measurements to see whether the company's figures furnished you were correct?

A. I did not because there would be no opportunity to do so.

By Edward Kibler: We didn't ask you to give any reason. Just answer the questions.

Q. How much did you fix as the cost of the different sizes?

A. The ten inch pipe, $1.30 a foot; the six inch pipe, the unit price is 70¢ a foot; the four inch pipe, 50¢ a foot; the three inch pipe, 40¢ per foot; for the two inch pipe the unit price is 32¢ per foot, and

for the one inch pipe, the unit price is 25¢ per foot. Those are the unit prices of the mains laid in the ground.

Q. How much do you allow for labor?

A. The same as the high pressure lines.

Q. Well, how much did you allow for labor in those two different instances?

A. I have answered that several times, but I will repeat it.

By J. R. Fitzgibbon: If counsel wants it, we are prepared to furnish a statement of these different valuations.

By Edward Kibler: He comes here with a statement and we want to know how he got at it.

53 The Witness: I made several valuations lately, and made studies of the unit price.

By Edward Kibler: Well, how much for labor and how much for material in these pipe lines?

A. I made no separation here because I used the same unit prices that I used in other appraisals.

Q. You don't know at this time what the prices of labor and material were?

A. I cannot give that from memory. I have the notes in the office.

Q. What is the total amount allowed for medium pressure gas mains?

A. $36,680.

Q. Is that all the medium pressure lines?

A. Yes, sir, I have given all the medium pressure lines.

Q. Now, the high pressure.

A. 8,800 feet of eight inch pipe; 10,375 of six inch pipe; 2,625 feet of four inch pipe; 3,300 feet of three inch pipe; 4,685 feet of two inch pipe; 60 feet of one inch pipe, and then there are 68,200 feet of four inch, which is the line outside of town running into the field, and referred to in the record as the Thurston line.

Q. How much did you allow as the total?

A. $54,750.

Q. That was the total amount allowed for the high pressure lines?

A. It was.

Q. Including the Thurston line?

A. Yes, sir.

Q. What were the different prices figured by you?

A. The eight inch pipe was put in at $1.05; the six inch pipe at 70¢; the four inch pipe at 50¢; the three inch pipe at 40¢; the two inch pipe at 32¢; the one inch pipe at 25¢.

54 Q. Those prices that you fixed, and the labor, are as of the present time.

A. They are.

Q. Now, the gate valves?

A. What is it that you wish?

Q. I want the number of them and the prices that you allowed.

A. There is one ten inch flanged valve at $57; three eight inch screwed gate valves at $36; four six inch screwed gate valves at $27;

ten six inch flanged valves at $29; twenty-one four inch screwed valves at $14; eleven three inch screwed gate valves at $11; and five two inch screwed gate valves at $7. All of these gate valves are tested to six hundred pounds pressure, which is customary in building gas plants.

By Edward Kibler: What is the total?

A. The total of those items gives $1,013.

Q. Those gate valves were put in as of the price of today?

A. They were.

Q. And the value of the labor as of today?

A. They were.

Q. How many regulators were there?

A. One eight inch by eight inch low pressure Chaplin-Fulton, at $158; three six inch by eight inch low pressure Chaplin-Fulton at $105. One six inch by six inch low pressure Chaplin-Fulton regulator at $105. Seven four inch by six inch low pressure Chaplin-Fulton regulators at $63. Seven four inch by four inch low pressure Chaplin-Fulton regulators at $63. Ten three inch by four inch low pressure Chaplin-Fulton regulators at $63. One three inch by three inch low pressure Chaplin-Fulton regulators at $63. Fourteen *inch* two inch
55 by two inch low pressure Chaplin-Fulton regulators at $28. One inch and a quarter by inch and a quarter low pressure Chaplin-Fulton regulators at $18. Nine one inch by one inch low pressure Chaplin-Fulton regulators at $14. One eight inch by eight inch high pressure Chaplin-Fulton regulator at $158. One six inch by six inch high pressure Chaplin-Fulton regulator at $105. Four four inch by four inch high pressure Chaplin-Fulton regulators at $63. One three inch by three inch high pressure Chaplin-Fulton regulators at $63. Five two inch by two inch high pressure Chaplin-Fulton regulators at $28.

By Edward Kibler: What is the total?

A. I haven't the total separated. All the regulators and all fittings pertaining to the regulators—the total is $8,795.

Q. Is there anything else that you found in connection with the examination of the property? Anything that entered into your calculations as to the value?

A. I have read the twelve items. I don't know whether you have the amount for each one in the record. I haven't checked them off.

Q. You said that an allowance was made for the good-will and the going-concern value.

A. No allowance was made for the good-will. That was specifically excluded.

Q. Well, as a going concern.

A. They are not synonymous.

Q. Well, how much was allowed for a going-concern?

A. Seventeen per cent of the reproduction cost new was allowed in this particular valuation.

By Edward Kibler: How much is that?

A. $72,768——

56 Q. And that enters into the total of the $356,708.

A. That is added to that. It does not enter into that.

By Edward Kibler: Is it included in that total?
A. No, sir.
By Edward Kibler; Is it included in the $356,708?
A. It is not.
Q. Was there anything allowed, Mr. Wyer for the franchise?
A. There was not.
Q. Was there anything else that entered into your estimate of the valuation?
A. The inventory of the supplies on hand.
Q. That is the inventory of what is on hand?
A. Yes, sir.
Q. How much does that amount to?
A. $2000.
Q. Did you make the inventory?
A. They prepared a statement showing the exact number of the different classes of fittings and pipe on hand and I took that and applied the prices to the different items.
Q. Did you or not make the inventory yourself?
A. I did not make the list of the material. I checked over, but I did not make the entire list.
Q. As a matter of fact, your valuation is based solely and exclusivley upon information derived, not from your own personal investigation and inspection, but from reports made to you by officers and agents of the Newark Natural Gas and Fuel Company.
A. I have taken the inventory of the property and used that as the basis for the entire valuation.
Q. Well, that is not answering the question.
The Court: If you can answer, you may. Did you make a
57 personal inspection?
A. Not of every piece of property. That would be a physical impossibility.
Q. What property did you make an inspection of to make your inventory of the property?
A. I inspected practically everything that could be easily seen on the surface, excluding the meters. I did not go and look at each meter. I did examine all the larger meters and all the regular sites and verified the sizes and checked the inventory of the stock of material as far as it was possible so to do.
Q. Why do you say as far as was possible to do?
A. It would not be possible for me to check every individual item.
Q. How much of the material did you inspect?
A. Of the two thousand dollar item?
Q. Yes.
A. About twenty-five per cent of that as an individual check.
Q. Outside of the meters and regulator stations, did you make any inspection of the other property?
A. None of the mains were uncovered, and none of the meters on the consumers' premises were inspected.
Q. Outside of the meters and regulator stations, did you make any inspection of any of the other tangible property of the company?

A. I made an inventory of the office equipment and vehicle equipment, and I examined the real estate.

Q. Did you examine anything else?

A. That covers the entire plant.

Q. Are there any other items which entered into your calculation as to the value of the plant?

A. For rate making purposes, an allowance for working capital would have to be made. After studying local conditions I estimated that $15,000 would be a fair allowance for working capital.

58 Q. What is that for?

A. To enable the company to do business.

Q. What are the expenses of the Newark Natural Gas and Fuel Company for any one year?

By J. R. Fitzgibbon: We have that in the record.

By Edward Kibler: Not in connection with this appraisement.

By J. R. Fitzgibbon: Well, you have it, whether it is in connection with this or anything else.

A. Do you mean the amount that they pay for everything?

Q. The amount that they pay in the operation of a plant.

A. The income was, beginning with 1902, $82,390—that is, the receipts for gas. That gives a relative idea of the volume of business.

Q. I will ask you if you know what the amount of the annual expenses for any one year of the Newark Natural Gas & Fuel Company was.

A. I can give it to you in a moment. (Witness gets memorandum.) The expenses, exclusive of the provision to keep the investment intact, the legal rate of interest, and profit commensurate with the hazard of the enterprise, in 1913, was $31,405.

Q. What were they in 1911?

A. $25,664.

Q. The average monthly expenses of the company would approximate $2,000 a month.

A. Those are not all the expenses that they have.

Q. The expenses of the Newark Natural Gas & Fuel Com-

59 pany—the distributing expenses in 1911, will approximate about $2,000 a month.

A. That is for that feature, excluding the other liabilities that they have to meet to pay for gas at the first of each month.

Q. You then consider that it would require to be kept on hand a deposit of $15,000 as a working capital to pay the expenses of the operation of the company of $2000 a month, do you?

A. Yes.

Q. Is there anything else that entered into your calculation of the value of the plant?

A. I think you have all the items now.

Q. The grand total of all the items is what?

A. In round figures $432,000.

Q. That includes the value as a going concern and does not allow for depreciation.

A. Yes, sir, it allows for depreciation.

Q. It does allow for depreciation?
A. Yes, sir, it does.
Q. It includes the going concern value?
A. Which is a necessary element in a rate case.
By Edward Kibler: Well, answer the question.
A. It does.
Q. Mr. Wyer, I will ask you whether or not skilled engineers do not allow, as an annual depreciation on natural gas distributing plants, a five per cent depreciation?
A. It requires approximately five per cent of the total value of the plant to keep that investment intact at all times. But that does not mean that, after a period of years, the plant would disappear.

60 The five per cent is the allowance that ought to be used and considered so that, in accordance with the doctrine laid down by the Supreme Court of the United States in the Knoxville Water case, the property may at all times be kept intact, so that after a period of years your property is worth just as much as it was at the beginning. But there is a distinction between an allowance for depreciation and shrinkage in value. They are not synonymous. The five per cent is to prevent a shrinkage in value.

Q. What would you allow for the shrinkage in the value?
A. That would depend upon how it was taken care of.
Q. Well, this plant.
A. I estimated that it would require five per cent to keep the investment intact. They can take care of that in one of two ways. They can place that money in a sinking fund and allow the plant to run down and deteriorate; or they can invest the money from year to year in order to keep the plant up to practically 100% efficiency.
By J. R. Fitzgibbon: That is the upkeep?
A. Yes, sir.
Q. This plant was in about twenty-five years?
A. Parts of it.
Q. The major portion of it has been in about twenty-five years.
A. Well, I wouldn't say the major portion.
Q. Well, do you know?
A. I don't know exactly. I have no records available as to the exact time when the different parts were installed.
Q. And you don't know how old the plant is?
A. All that I know is the present condition of the plant, which was considered in valuing the plant.

61 Q. You said in answering a question awhile ago that the life of a distributing plant runs from a few years to forty or fifty years. Wasn't that your answer to a question?

A. Yes.
Q. So if a gas plant had been in operation for twenty-five years, it would have seen its best days to a great extent?
A. Not necessarily. A great deal of the pipe here may be just as good as the day it was put in. I examined some pipe a year and a half ago which had the original mill scale on it; showing that it was not in the least corroded and was worth as much as it was when

it was installed. Other pipes were badly corroded, due to the electricity from the railway.

Q. How many miles of street railway are there here?

A. I couldn't tell you that.

Q. How many miles of pipe are near the street railway?

A. I couldn't give that from memory. I can furnish it.

Q. Will you do so?

A. Yes, sir. I have it in my notes.

Q. You allowed $33,000 for street paving?

A. Yes, sir.

Q. What do you mean by that?

A. The cost of cutting through the pavement, if the plant were to be built in its entirety today. As I said before, not all of that sum was expended by this company. There is no opportunity to know now definitely what amount they did expend. We know that part of the mains were laid by cutting through the pavement. The public utility law of Ohio provides——

By Edward Kibler: I object.

62 The Witness: It provides specifically that the valuation of public utility plants——

By Edward Kibler: I object.

The Witness: Shall be made along a certain definite line.

By Edward Kibler: I object.

The Witness: Section 49-9, paragraph——

By Frank A. Bolton: We object to him arguing this case to the court.

The Court: Have you anything further?

Q. You have no knowledge on your own account, Mr. Wyer, as to whether or not the pavement in the streets was laid subsequent or prior to the laying of the natural gas pipes, have you?

A. No.

Q. You figured on the basis of replacing the pipe in the streets that are now paved in the City of Newark.

A. Just where the mains are laid at the present time.

Q. And you allowed $33,000 for simply the repaving item?

A. The cost of cutting through and replacing the paving.

Q. In your estimate of the value of the tangible property of the Newark Natural Gas and Fuel Company, have you taken into consideration also the value of the Artificial Gas Company's plant?

A. All of the old Artificial Gas Company's plant was ex-
63 cluded from the valuation. The valuation here is only that pertaining to the Natural Gas Plant. In one case, where the main of the old artificial plant is now in actual use—that is, where the main parallels an existing natural gas main—I purposely excluded that because it would not be so positioned if a plant were to be built new today. And in order to make the valuation of the

plant fair, all of that old equipment was excluded from this valuation.

Q. Have you a copy of your estimate of the values of the Newark Natural Gas and Fuel Company?

A. I have.

Q. Will you kindly let us have it?

By J. R. Fitzgibbon: Tomorrow morning——

By Edward Kibler: We would like to have it now.

By J. R. Fitzgibbon: In connection with his cross examination we would be pleased to offer it in evidence.

By Edward Kibler: We are asking for it without any ifs or ands or conditions.

By J. R. Fitzgibbon: We expect to offer it in evidence when they finish.

By Frank A. Bolton: We would like to examine it now. We would like to use it this evening.

By J. R. Fitzgibbon: We can give it to you. We offer it.

The Court: You offer it in connection with his examination?

64 By J. R. Fitzgibbon: In connection with his examination, yes, sir.

The Court: Well, it will be received. Are you ready to turn it over now?

By J. R. Fitzgibbon: Yes, sir. I will ask the stenographer to mark it.

(Said paper was here marked by the stenographer AAA.)

By Edward Kibler: We object to the introduction of this in evidence.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

(Said paper is hereto attached, marked AAA and made part hereof.)

The Court: Have you anything else?

By Edward Kibler: We would like to have the witness produce the information that we asked for.

The Court: Yes, sir.

The Witness: My recollection is that they want an analysis of my unit prices on the mains in the streets, and a statement showing the number of miles of mains which are now parallel with the street railway, or the number of miles of street railway that are

65 parallel with the mains. I can furnish that either way. Is that all that you want?

By Ralph Norpell: Have you the valuation of the pipe line which you say runs south of town, which you took into consideration?

A. That is in the report.

By Ralph Norpell: Is that separate?

A. That is separate.

By Edward Kibler: We would like to have an opportunity to ask him some further questions in the morning.

The Court: Yes, sir.

By Edward Kibler: We want the amount that he figured for the cost of the pipe and for laying the pipe of the various sizes that he enumerated.

The Witness: I have all that data at the office and I can bring it in the morning.

The Court: Have you anything further?

By Edward Kibler: That is all. We would like to have a chance to cross-examine him further in the morning.

The Court: Have you anything further, Mr. Fitzgibbon?

By J. R. Fitzgibbon: We have one or two questions.

66 SAMUEL S. WYER.

Redirect examination.

Examined by J. R. Fitzgibbon:

Q. What factors are to be considered as a basis of returns which this defendant company is entitled to have upon the amount of the investment which you have stated it has in this City, for rate making purposes?

By Edward Kibler: I object to that because that is the very question that this court has to decide.

By Judge Douglass: He is an expert.

By Edward Kibler: An expert cannot be asked a legal question.

The Court: He may answer.

By Edward Kibler: Did the court understand the question?

The Court: I think so. Read it.

(The Stenographer read the question.)

By Edward Kibler: That is a question of law.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

67 A. There are three factors. First, provision to at all times keep the original investment intact. That is a certain annual allowance, so that at the end of any period of years you have the same value on your property that you had at the beginning, either in the property itself, or by having money in a sinking fund to make up the shrinkage of that property. The second feature is——

Q. (Interrupting.) Have you estimated what per cent that is in this particular instance?

By Edward Kibler: I object.

Q. Have you made an estimate of that?

A. Yes, sir. The allowance should be five per cent of the value of the property.

By Edward Kibler: I object and move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

The Witness: The second factor that ought to be considered is

the legal rate of interest on the value of the property. The Third is an additional margin of profit commensurate with the hazard of the enterprise. In considering a natural gas plant, it is necessary to consider the fact that the hazard in the natural gas business is greater than that in any mining operation. The securing of gas is essentially a mining proposition. With that you have linked
68 the duties going with a public service corporation, and the hazard in the natural gas business, which must be compensated for by a profit in addition to the legal rate of interest—it is greater than that in any other public utility service.

By Edward Kibler: I object and move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception. And I move to rule out the part of the answer that is argumentative. I make that motion separately.
The Court: We will let it stand. We think the answer is proper.
By Edward Kibler: Note an exception.

Q. Have you considered what would be a fair per cent of return on the third item that you have mentioned?

By Edward Kibler: I object.
The Court: If you can give it, you may.

A. It ought to be not less than five per cent.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

69 Q. Mr. Wyer, since you testified before the Court of Common Pleas—since this record has been made up—have you had any experience in the valuation of natural gas plants which qualifies you to testify in a rate making case?

By Edward Kibler: I object.
The Court: He may answer.
By Edward Kibler: I wish an exception.
The Court: I understand the question is since the other trial.
By J. R. Fitzgibbon: Yes, sir.

A. I have just recently completed a valuation of a natural gas distributing plant at Richmond, Indiana, which valuation was used before the Indiana Public Utilities Commission.
Q. Any other plants since the trial in the Court of Common Pleas?
A. Not where the valuations have been used in courts. We have several other valuations under way.
Q. Have you made valuations of other plants?
A. Yes, sir. Of an artificial gas plant at Terre Haute, Indiana; the valuation was used before the Indiana Public Utilities Commission. I just finished a valuation of an artificial gas plant at Bloomington, Illinois, where the valuation was used before the Illinois Public Utilities Commission. And within the last year I fiuished the valuation of an electric property at Richmond, Indiana,

which valuation was used before the Indiana Public Utilities Commission.

70 By Edward Kibler: I move to rule that out because it is a repetition of his former testimony except in so far as the electric plant is concerned.

The Court: It is simply showing his experience.

By Edward Kibler: He testified about that.

The Court: The motion is overruled.

By Edward Kibler: I wish an exception.

By J. R. Fitzgibbon: That is all.

SAMUEL S. WYER,

Recross-examination.

Examined by Mr. Frank A. Bolton:

Q. These examinations which were made, and which were used before the state commissions, were made on behalf of the gas companies, were they not?

A. In some cases in behalf of the companies and in some cases on behalf of the banks which owned the securities.

Q. But in all cases on behalf of the owners of gas companies.

A. Yes, sir.

Q. You said that there was 68,200 of four inch line known as the Thurston line?

A. Yes, sir.

Q. How much of the Thurston line is in use today?

A. All of that length is in use today at the present time.

71 Q. All of that length?

A. Yes, sir.

Q. All that you have in?

A. Yes, sir.

Q. The hazard in the natural gas business is in the production end of the business, isn't it?

A. No, sir, for the reason that a natural gas distributing plant is absolutely worthless unless you have the gas to furnish.

Q. Well, if you have the gas?

A. The hazard still remains essentially the same.

Q. The hazard in the distributing end of the investment is as much as in the producing end, is it, according to your opinion?

A. It is essentially the same.

Q. The same thing. So that the hazard in the natural gas business is considerably different from the hazard in any other public service business—that is, the distributing end of it?

A. That is true for the reason that it is essentially a mining proposition. And that differentiates the gas business from every other public utility service.

Q. A distributing company is not in the mining business, is it?

A. It is indirectly, because it cannot operate its plant unless it gets the gas from the mining end of the business.

Q. If a company has been in operation for twenty-five years, and has taken off profits of a million dollars on a capital stock of $81,000, do you say that there is still a hazard in the investment of the company?

A. The question of profits, and stock issues, purchase price from former owners, or any other matters of past history, were not considered, and would have no bearing at all in a rate case.

Q. They would have no bearing so far as you are concerned in making an estimate of the profits that a distributing company should earn.

A. They would not.

72 Q. And you did not take that into consideration?

A. Simply for the reason that the facts that you allege did not exist. I could not take into consideration a condition that did not exist.

Q. Well, you didn't?

A. No, sir, I couldn't because the condition that you allege did not exist.

By Frank A. Bolton: That is all.

By Judge Douglass: I will ask you to answer why you didn't.

A. Because the allegations made by the attorney do not exist.

By Edward Kibler: I will ask to rule that answer out.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

The Court: Have you anything further?

By Judge Douglass: That is all.

By Ralph Norpell: We will want to examine him further in the morning, and we may want to put in some testimony in rebuttal in the morning after he has been examined further.

By Judge Douglass: Well, we ought to know what we are going to have in the morning.

73 By Edward Kibler: It is only in rebuttal of this witness.

The Court: We do not like to lose the time if he can avoid it but I do not see how to hurry it. How much time will you want to argue the case?

By Judge Douglass: I think two and one-half hours a side would be enough.

The Court: Then we will adjourn now until tomorrow morning.

(Here court adjourned until 9 o'clock tomorrow morning.)

9 o'clock a. m.

SAMUEL S. WYER (Recalled).

Examined by Frank A. Bolton:

Q. Mr. Wyer, have you prepared a statement showing the price of pipe and the labor in laying it for the low pressure lines in the City of Newark, Ohio?

A. I have all the analytical data that was used in arriving at the unit price of the valuation.

Q. Well, it would save time if you would answer the question, and not make any argument in the case. Just simply answer the question.

A. I have.

Q. Will you give the different prices?

A. The first is a study of the variation in prices in order to arrive at what would be a fair price to use in the valuation at the present time. A typical case cited is the four inch pipe. I have compiled the actual prices on this size of pipe from December 31,
74 1903 down to April 1, 1914, using the dates which are the official dates for changing prices as published by the pipe manufacturers. On December 31, 1903, the price per foot of four in. pipe was 27¢; on February 1, 1904, it was 28¢; on March 1, 1904, it was 29.16¢ on June 1, 1904, it was 28.08¢; July 1, 1904, it fell back to 27¢; September 3, 1904, it dropped down to 24.84¢; October 19, 1904, the price was 25.92¢; October 1, 1904, the price was 27¢; on January 2, 1905, the price was 27.54¢.

By Edward Kibler: Can't he give us the price from which he figured. We want to know the figure you used in the calculations that you gave us yesterday.

The Witness: He also asked how I arrived at that figure. I used 22¢ for four inch pipe.

Q. And how much for the labor?

A. Labor of laying a refilling the trenches, 27¢ per lineal foot.

Q. Now, the next low pressure pipe?

A. What size?

Q. The next size that you have?

A. Three inch. The cost of the pipe was 16¢; cost of labor refilling trenches and all fittings, 23¼¢.

Q. Now, the next?

A. Two and one-half inch pipe, 12¢; labor refilling and fitting, 24½¢.

Q. Now, the next?

A. Two inch pipe. Pipe 8¢; labor, laying and refilling the trenches and fittings, 23½¢. One and one-half inch pipe, 6¢, labor, refilling and fittings, 21½¢. One inch pipe, 4¢, labor, laying and refilling and fittings, 20½¢. The haulage charge on the one inch pipe was ½¢; on the one and one-half inch pipe,
75 ½¢; on the two inch pipe, ½¢; on the two and one-half inch pipe, ½¢; on the three inch pipe, ¾¢; on the four inch pipe. 1¢.

The Court: We think you are going over the same thing.

By Frank A. Bolton: We are separating the labor and material.

The Court: Go ahead.

Q. Now, give the medium pressure pipe.

A. The same unit prices were used on the different lines, whether they were medium or low or high. I have the prices by the size. On the five inch pipe, the pipe, including the freight, was 30¢; labor, laying and refilling trenches and fittings, was 28½¢; haulage, 1½¢; on the five and ⅝ inch pipe, including the freight, is 39¢; haulage 2¢; labor, laying, refilling trenches and fittings 29¢; the six

inch, 40¢; haulage 2¢, labor laying, and refilling the trench and fittings, 28¢. The eight inch pipe, and freight, 57¢, haulage, 2¢; labor laying, refilling trenches and fittings, 46¢; ten inch pipe, including the freight is 82¢; haulage, 2¢; labor, laying, refilling and fittings, 46¢. Twelve inch size pipe, $1.01; haulage 3¢; labor, laying, refilling trench and fittings 56¢.

Q. Are those all the sizes used in the system?

A. That covers the range of sizes.

Q. Did you find out what the amount of pipe which parallels the street railway company is?

A. Yes, sir. I have that here. There are five and eighty-six hundredths miles of tracks parallel to mains.

Q. Do you know the different sizes of pipe that were used in paralleling the railroad?

A. I can read them off. It will take some time to do that.

76 Starting on the west—on West Main Street, is a three inch pipe; then a two and one-half inch pipe; then a three inch, then a four inch; a six; another six; a three inch; a six inch; another six inch pipe; another six inch. Starting on West Church Street, a short distance west of the car barns, a two inch; a three inch; a two inch; three; four; four. Starting down near the south corporation line, going north on North Williams Street there is a two inch; a three inch; a four inch; a five inch; and a four inch. Starting at the south corporation line, and going northeast along Union Street: A two inch; three inch; four inch. On Eleventh Street, due north, between West Main Street and Church Street, a four inch. On North Fourth Street, six inch. On North Street, six inch, and a three inch. On Maple Street, three inch; around the public square: Six inch; six inch; six and six. On East Main Street, east of the public square, six inch; six inch; and four inch; out to the corporation line. That line extends beyond the corporation line for a distance of fifteen hundred feet, and it is four inches in diameter. On North Cedar Street, North of East Main Street, a four inch; five; three; two; and three.

Q. What is the total amount of five in miles of the Newark Natural Gas & Fuel Company in the City of Newark?

A. I haven't the total. I simply have the individual footings for the different sizes.

Q. Have you the lengths of the different sizes of pipe which you have given us here?

A. They were all read into the record yesterday.

77 Q. Well, the different sizes on the streets that parallel the street railway.

A. They can be obtained from this.

Q. You haven't them there?

A. They are simply marked where they change from one size to another.

Q. You haven't the distances?

A. They would have to be scaled off.

Q. Did you make an examination of the pipe lines of the Newark

Natural Gas & Fuel Company for the Company in regard to the depreciation by electrolysis?

A. Yes, sir.

Q. When was that made?

A. A little over a year ago.

Q. What amount of depreciation did you find?

A. A very marked depreciation in certain localities. For instance, on West Church Street, near the sub-station, the depreciation on some of the lines was very marked. In other parts of the town, there are no evidences of any.

Q. What was the total amount of depreciation that you reported to the Company?

A. I did not report the total because that would be impossible to ascertain at that time, or at the present time.

Q. What did you report to the Company as to the amount of electrolysis?

A. That the property was being badly damaged by the current from the street railway, and that measures ought to be taken at once to keep the stray currents off for the reason that they would affect not only the Gas Company but the public as well. The lines are carrying such large currents that there is danger of those currents going into the houses and producing a leak, and with
78 the gas leaking from those fittings, you have ideal conditions for a gas explosion.

Q. Did you make any estimate of the amount of damage by electrolysis?

A. No, sir, I didn't because the damage was local. The damage is not general. It is local.

Q. You didn't examine the entire system that is covered by the street railway company for the purpose of discovering all of the electrolysis that there might be.

A. We did not uncover the mains except where we found trouble.

Q. How many places did you uncover?

A. I couldn't recall the exact number. In a great many cases, we were able to get the current flow without uncovering the mains. For instance, where the mains crossed bridges, or where they were exposed. I don't recollect the number.

Q. As to the labor in laying the pipes of the Newark Natural Gas & Fuel Company, what did you figure as to the depth that the pipe was to be laid?

A. Approximately thirty inches, average cover.

By Mr. Bolton: That is all.

By J. R. Fitzgibbon: That is all. We rest.

By Mr. Bolton: We will call Mr. Sutor.

Thereupon, the plaintiff, to further maintain the issues upon its part introduced the following witnesses:

79 J. HOPE SUTOR, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Frank A. Bolton:

Q. Your name is J. Hope Sutor?
A. It is, yes, sir.
Q. Where do you live, Mr. Sutor?
A. At Zanesville.
Q. What is your occupation?
A. A public accountant.
Q. How long have you been engaged in that?
A. I have been following that occupation for over ten years.
Q. I will ask you if, in the capacity of public accountant, you had any employment on behalf of the City of Newark in reference to the Newark Natural Gas & Fuel Company.
A. I did.
Q. Did you examine the books of the Newark Natural Gas & Fuel Company.
A. I did.
Q. I will ask you if you prepared an itemized statement of the investment of the Newark Natural Gas & Fuel Company for the period from 1902 to 1911.
A. I did.

By J. R. Fitzgibbon: We object to that. That is covered in the record, and it is not in rebuttal of anything.
By Frank A. Bolton: It is simply as to the general amount of the investment. We do not dispute the figures—this is not an attempt to dispute the figures that they made. We want to show the actual cost of the production of the plant.
By J. R. Fitzgibbon: Well, he says he doesn't dispute our figures. We object to this. We do not think it is competent.
80 The Court: The objection is overruled.
By J. R. Fitzgibbon: Wasn't all this matter gone into before?
By Frank A. Bolton: No, sir, this was not.

Q. I will ask you if this is the statement that you prepared as to the investment of the Newark Natural Gas & Fuel Company, upon an examination of the Newark Natural Gas & Fuel Company's books? (Hands paper to the witness.)
A. It is.

By Frank A. Bolton: I will offer that in evidence.
(Said paper was here marked BBB.)
By J. R. Fitzgibbon: We object to it.
The Court: The objection is overruled.
By J. R. Fitzgibbon: Note an exception.
(Said paper is hereto attached marked BBB, and made part hereof.)

Q. I will ask you whether or not you made an examination of the expenses of the operation of the Newark Natural Gas and Fuel Company from the beginning of the Company to 1911.

A. Do you mean from the first beginning?

Q. Yes, sir.

A. Yes, sir, as far as the records went.

Q. I will ask you whether or not you made an examination as to the taxes paid by the Newark Natural Gas and Fuel Company.

A. Yes, sir.

81 Q. How were the taxes treated by the Newark Natural Gas and Fuel Company?

A. They were treated under the general head of "general expenses."

By Frank A. Bolton: I wish to offer that paper in evidence.

(Said paper was here marked CCC.)

By J. R. Fitzgibbon: We object to it.

The Court: The objection is overruled.

By J. R. Fitzgibbon: Note an exception.

(Said paper is hereto attached marked CCC and made part hereof.)

By Mr. Bolton: That is all.

Counsel for defendant moved the court to strike from the record the above papers marked BBB and CCC. The court overruled said motion, to which ruling of the court, counsel for defendant then and there excepted.

J. HOPE SUTOR.

Cross-examination.

Examined by J. R. Fitzgibbon:

Q. When did you make this examination, as represented by exhibit BBB?

A. About eighteen months ago, I think.

Q. That examination was made previous to the hearing of this case in the Court of Common Pleas?

A. Yes, sir.

Q. This valuation was not placed in evidence at that time, was it?

A. Which?

82 Q. The valuation that you made was not placed in evidence on behalf of the City in the hearing in the Court of Common Pleas?

A. I couldn't answer about that because I don't recollect what was put in.

Q. This is simply a report from the books of the Company, showing the expenditures of the Company up until that time in the way of an investment?

A. As they were recorded in the Company's books.

Q. It was not a valuation made by you?

A. Oh, no, not at all.

By Mr. Mackey: You have recorded here just what you found on the Company's books?

A. Yes, sir.

By J. R. Fitzgibbon: And that was from what year until what year?

A. From 1902 to 1911, inclusive. I think 1902 possibly only covered it from June 1st. The first five months were not included.

Q. Then you have no figures from 1899 to 1902?

A. Not on there. I have those figures as far as I could get them.

Q. Is this the inventory as shown by the books?

A. It is not an inventory.

Q. It is simply the valuation as placed on the books, as to the different physical properties of the Company?

A. Yes, sir. As shown by their books.

Q. And this Exhibit CCC is simply an itemized statement of the expenses of operation of the Newark plant during that period of time?

A. Yes, sir.

83 Q. As it appears from the books of the Company?

A. Yes, sir.

Q. Exhibit CCC does not show, as part of the operating expenses, what this Company pays for gas?

A. I don't think that is in that. (Witness examines Exhibit CCC.) No, sir, this is just the operating expenses.

By Ralph Norpell: That is simply in rebuttal of Wyer's testimony as to the value of the plant.

By J. R. Fitzgibbon: That is all.

J. HOPE SUTOR.

Redirect examination.

Examined by Frank A. Bolton:

Q. Mr. Sutor, calling your attention to Exhibit BBB, I will ask you, in the second column, under the head of December, 1902, and the column preceding that—I will ask you what those two columns represent.

A. The first column is headed "inventory."

Q. Where did you get that?

A. From an inventory in the office of the Union Gas Corporation of Pittsburgh.

Q. As a matter of fact, do you know who prepared that inventory?

A. No sir. I don't.

By Mr. Bolton: That is all.

The Court: Have you anything further?

84 By Ralph Norpell: We have some witnesses who will be very brief. I will call Mr. Christian.

WILLIAM C. CHRISTIAN, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Ralph Norpell:

Q. What position do you hold?

A. I am Director of Public Service in the City of Newark.

Q. For what length of time have you served in that capacity?

A. I served during the years 1906, 1907 as a member of the Board of Public Service during the construction of the water works.

Q. At what other time?

A. And from September, 1910 to January 1, 1912. And since the 1st of January this year.

Q. What experience have you had in the laying of pipe in the streets?

A. Well, I have had considerable during that time. There have been possibly thirty miles of pipe laid under my supervision.

Q. What is the depth that you ordinarily lay the pipe?

A. Four and one half feet, cover.

Q. That is the water pipe?

A. Yes, sir.

Q. Well, now, considering that the pipe was laid thirty inches deep, what would be the total cost per foot of laying a two and one-half inch pipe?

By J. R. Fitzgibbon: If he knows.

85 By Ralph Norpell: If you know. The reasonable cost.

A. Well, I haven't had any experience with two and one-half inch pipe. We have laid two inch pipe.

Q. Well, what would it be with two inch pipe?

A. The labor of excavating and laying the pipe and back-filling would cost about ten cents a foot.

Q. That is two inch pipe?

A. Yes, sir.

Q. Is there any appreciable difference between two and two and one-half inch pipe, in the cost of laying?

A. Very little. A little more labor in handling the pipe.

Q. In handling the pipe?

A. Yes, sir.

Q. Is there any more expense in excavating and covering?

A. No, sir.

Q. Have you had any experience in laying in. and a half pipe?

A. Yes, sir.

Q. What would be the reasonable cost per foot of laying inch and a half pipe thirty inches deep?

A. It should not cost over eight cents.

Q. What, if you know, would be the reasonable total cost of laying five inch pipe, thirty inches deep?

A. There wouldn't be very much difference between five and six inch pipe. We never laid any five inch, but we laid six inch pipe, and, with a four and one-half foot cover, it cost 22¢.

Q. With a four and one half foot cover?
A. Yes, sir.
Q. What would it be with a thirty inch cover?
A. There would be a difference in the excavation part alone, which would probably be thirty per cent.
Q. Thirty per cent off of twenty-two?
A. Yes, sir. It would be about fifteen or sixteen cents.
86 Q. Now, eight inch pipe?
A. With a two and one-half foot cover—about 20¢.
Q. What would you say as to the cost of laying ten inch pipe?
A. Ten inch would be in the neighborhood of 26¢ or 27¢.
Q. What would you say as to twelve inch pipe?
A. Twelve inch pipe would increase to possibly 32¢.
Q. Can you give an approximate idea of the number of feet of pipe that you laid during your superintendency of the water work construction?
A. A total of in the neighborhood of thirty miles.
Q. Thirty miles?
A. Yes, sir.
Q. Mr. Christian, how long have you lived in Newark?
A. All my life.
Q. Do you remember when the gas plant was put in here?
A. Yes, sir.
Q. About when was that—the natural gas plant property?
A. I don't recall the exact year, right now, but I was slightly interested in the original investment.
Q. In the original investment?
A. Yes, sir.
Q. Do you remember about the year? Do you remember about how many years ago it has been?
A. No, sir, I couldn't say definitely.
Q. Has it been as long as twenty-five years?
A. Yes, sir.
Q. Do you remember what the condition of the streets was at that time, as to the paving—at the time when the original plant was put in—as to whether or not there were any streets paved and if so, how far along had the pavement gone?
A. There was very little twenty-five years ago.
87 Q. Well, was there any?
A. I don't believe there was.
Q. Do you remember whether or not there was any street paving down when this pipe was put in originally?
A. I think not.
Q. You were an original stockholder in the old company?
A. Yes, sir, with E. H. Everett.
Q. E. H. Everett was at the head of it?
A. Yes, sir. There wasn't any stock in my name, but I had five hundred dollars invested in it.

By Ralph Norpell: That is all.

WILLIAM C. CHRISTIAN.

Cross-examination.

Examined by J. R. Fitzgibbon:

Q. Mr. Christian, you are present Public Service Director of the City of Newark?

A. Yes, sir.

Q. And you are connected with the city administration in that capacity?

A. Yes, sir.

Q. There weren't very many miles of pipe laid in the original construction of this plant, were there? I mean the natural gas plant?

A. No, sir.

Q. Practically all of the construction of the natural gas plant, as we have it today, has been from 1902 down, hasn't it?

A. Yes, sir, it was very small at that time.

Q. A great deal of paving was done up until 1902 in this City; and considerable has been done since that time?

A. Yes, sir.

Q. You said that in the original construction of the Newark Natural Gas and Fuel Company there weren't very many
88 miles of pipe laid, and you said that practically all of the construction of the Newark Natural Gas and Fuel Company, as we understand the plant now, has been since the present holders got possession of it in 1902 or thereabouts?

A. Yes, sir. But I don't recollect their ever taking up any pavement to lay any pipe.

Q. Well, you don't know whether they ever did or not?

A. No, sir, not positively.

Q. You know that in 1902 there were a great many streets in this city that were paved?

A. I couldn't give the actual amount now, but from West Main Street to the creek bridge——

Q. (Interrupting.) Well, you can answer the question generally. I am asking you generally if it is not a fact that in 1902 a great many of the streets in this city were paved.

A. Not a great many.

Q. In 1889, or thereabouts, the population of Newark was about twelve or fourteen thousand?

A. Yes, sir.

Q. And now it is in the neighborhood of twenty-eight thousand according to the census, and thirty-five thousand when we talk about it ourselves. That is correct, isn't it?

A. Yes, sir. In 1901 or 1902, Church Street was paved. I was connected with the street railroad and we laid the street railroad before there was any paving on Church Street, and that was built in 1890; and the gas pipes were in Church Street then.

Q. What was in Church Street at that time?

A. The gas pipe.

89 Q. That is the street that is parallel with West Main Street?

A. Yes, sir. Church Street was paved at that time from Eleventh Street east; in 1902.

Q. In 1902?

A. I think it was in that year. It was paved after we constructed the street railroad in 1890.

Q. Wasn't Hudson Avenue paved at that time?

A. I think a little later. The first pavement was laid around the public square and as far west as Fourth Street.

Q. Don't you know that much of the pavement in this town has been down to exceed twelve to fourteen years, in the principal streets?

A. No, sir, I think not.

Q. Do you say not?

A. I think not.

Q. These figures that you have given as to the cost of labor, are they based upon figures as of today?

A. Yes, sir, I laid an inch pipe last week for W. H. Smith on Central Avenue. One inch galvanized iron pipe, four foot cover, which cost, for the common labor, $13, and for the supervision, $3.25, 156 feet.

Q. That was just one small job?

A. Yes, sir. And it always costs more on a small job than it does on a large one.

Q. That generally holds true, does it?

A. Yes, sir. Your waste is greater and your time.

Q. That was done by the city?

A. Yes, sir.

Q. By employes regularly — by the city to do that work?

A. Yes, sir, regular employees. It was a case where Mr. Smith had to pay the bill. The bill was rendered to him and he paid it. The actual time was kept.

90 Q. You haven't done any laying of pipe to the depth of thirty inches, have you?

A. No, sir.

Q. All the experience you have had was what depth?

A. Four and one-half feet.

Q. And you are basing the estimate on what it costs to lay pipe four feet and a half?

A. Yes, sir. It is more expensive than two and one-half feet.

Q. That would naturally follow?

A. Yes, sir.

Q. You don't know how many miles of pipe were laid by the Newark Natural Gas and Fuel Company since 1900?

A. No, sir. I haven't any knowledge of that.

Q. And up until 1906, you have no knowledge of the cost of laying the pipe?

A. No, sir.

By J. R. Fitzgibbon: That is all.

WILLIAM C. CHRISTIAN.

Redirect examination.

Examined by Ralph Norpell:

Q. What size was the pipe that you put in last week?
A. One inch.
Q. And you put it in how deep?
A. Four foot cover.
Q. How much did that cost a foot?
A. There were 156 feet of it. About 10 and 1-3¢ a foot.
Q. About ten and 1-3¢?
A. Yes, sir.
Q. When this original gas pipe was put in, where were the mains placed? In what part of town—the original distribution of the pipe?
A. I don't recall that. I know that we were among the first consumers; at home. We lived in the south end on Poplar Street at that time. We had it in our place of business.
91 Q. Did they have it around the Square?
A. Yes, sir.
Q. Did they have it on the principal streets?
A. Yes, sir.
Q. On how many of them?
A. I couldn't say how extensive that was.
Q. Was it on Main Street?
A. Yes, sir.
Q. On Church Street?
A. Yes, sir.
Q. On Third Street?
A. Yes, sir.
Q. And on Second Street and Fifth Streets?
A. Yes, sir. All the territory close. I know we had in the south end of the city.
Q. When the pavement was laid down, where was it laid first?
A. The first pavement was laid around the public square west as far as Fourth Street and north as far as Church Street.
Q. And in putting down the gas pipe and the pavement, they commenced around the square?
A. Yes, sir.
Q. The pavement followed the pipes as a rule?
A. Yes, sir. There were two or three wells south of the city, and one north of the city at the beginning. And they made an attempt to get gas along the canal. That is, towards the Park.
Q. Did you ever know of a brick pavement in the town being taken up to put a pipe in——
A. Do you mean to lay a main?
Q. Yes, sir.
A. No, sir.

By Ralph Norpell: That is all.

92 WILLIAM C. CHRISTIAN.

Recross-examination.

Examined by J. R. Fitzgibbon:

Q. *Was* the price that you have given as to labor include the fittings?
A. Yes, sir. All the fittings there are comes on the pipe. The coupling. That is charged with the pipe. In running a line, at each property line we put in a "T" and they come fifty feet apart.
Q. Is that the same construction that is used in laying gas mains?
A. It is on a small line. Where we put it in like we did for Mr. Smith, we just put in a "T" and run the half inch line.
Q. In laying gas mains, they use rubber packing, don't they?
A. Yes, sir. I was referring to the small pipe.
Q. You were referring to the smaller pipe?
A. Yes, sir.

By J. R. Fitzgibbon: That is all.

FRED C. EVANS, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Ralph Norpell:

Q. What is your business?
A. I am in the supply business.
Q. What kind of supplies?
A. Plumber and mill supplies.
Q. Are you a jobber?
A. Yes, sir.
93 Q. Do you handle any line pipe?
A. We don't carry line pipe in stock.
Q. Do you sell it?
A. Occasionally.
Q. What size do you handle?
A. From two and a half inch to six inch. From two and a half up to six inches.
Q. Two and a half inches is the smallest?
A. Yes, sir.
Q. What is the present price of two and a half inch pipe?
A. That is what they call standard line pipe. Two and a half inch is worth $13.90 a hundred feet; three inch is worth $17.21 a hundred feet; three and one-half inch is worth $20.78 a hundred feet.
Q. Is that what you sell it to the trade for?
A. Yes, sir.
Q. That is the retail price?
A. Yes, sir.
Q. What is the wholesale price?
A. Well, that is the wholesale price in less than car loads.

Q. In less than car loads?
A. Yes, sir.
Q. In less than car load lots ?
A. Yes, sir.
Q. What do you sell six inch pipe for in car load lots?
A. We do not sell it in car load lots. I am giving the price on less than car loads.
Q. You sell any amount that a man wants, do you?
A. Yes, sir.
Q. You retail it?
A. We sell him whatever he wants.
Q. Whatever he wants?
A. Yes, sir.
Q. If a man comes there for one length, you charge him the same price as if he comes there for 100 lengths, do you?
A. Yes, sir.
94 Q. Well, I cannot figure out whether you are a wholesaler or retailer in that respect.
A. Well, I am just telling you what we do.
Q. What do you get for six inch pipe?
A. $43.36 a hundred feet.
Q. What do you get for eight inch pipe?
A. $64.39.
Q. How much for ten inch?
A. I haven't any price on ten inch.
Q. What for twelve inch?
A. I haven't the price on that either. I haven't anything over eight inch.
Q. Do you sell anything in car load lots?
A. Not in line pipe, but we do in standard pipe, such as the plumbers use. We sell the Gas Company here some pipe, but not line pipe. They use the standard pipe when they get pipe from us.

By Mr. Norpell: That is all.
By J. R. Fitzgibbon: We have no questions.
(There was no cross examination.)
By Mr. Bolton: We rest.
The Court: Have you anything further?
By Mr. Norpell: No, sir.

By Judge Douglass: That is all.

Here the parties rested their case, and no other, or further testimony, or evidence, was offered or given by either of the par-
95 ties, the foregoing comprising the entire testimony and evidence heard in the case, being the entire testimony and evidence acted upon by the court, and being a full, complete, and accurate transcript of verbatim stenographic notes of the trial, taken in open court during the progress of the cause.

Whereupon, after argument by counsel, and consideration by the court, the court found the issues in favor of the plaintiff, and against

the defendant. The finding, judgment, order and decree of the court appear fully of record in the cause.

Counsel for defendant excepted, at the time, to said finding, judgment, order and decree of the court.

Whereupon, within three days after the rendition of said finding, judgment, order and decree of the court, and at said term, counsel for the defendant, The Newark Natural Gas & Fuel Company, filed a motion in said court for the setting aside of said finding, judgment, order and decree of the court and the granting of a new trial herein, as appears of record; which motion the court overruled; to which ruling of the court, counsel for defendant then and there excepted.

In behalf of this, and the several other exceptions and matters herein specifically enumerated, the defendant, The Newark Natural Gas & Fuel Company, by counsel, on the 27th day of Oct., A. D. 1914, files this, its Bill of Exceptions, in said cause, with the Clerk of the Court of Appeals, Licking County, Ohio, being within forty days after the date of the rendition of said finding, judgment,
96 order and decree, and being also with- forty days after the date of the overruling of the motion for a new trial herein.

EUGENE MACKAY,
S. M. DOUGLASS,
FITZGIBBON, MONTGOMERY & BLACK,
*Attorneys for Defendant.*

On the said 27th day of October, A. D. 1914, I, the Clerk of the Court of Appeals, Licking County, Ohio, notified Ralph Norpell, City Solicitor; Frank A. Bolton; and Kibler & Kibler, counsel for the plaintiff, of the filing of this Bill of Exceptions; said notice being given in writing and a true copy of said notice being now on file in my office; the said notice having been given as aforesaid on the same day that this Bill of Exceptions was filed by me as aforesaid.

[SEAL.] B. O. HORTON,
*Clerk of the Court of Appeals,*
*Licking County, Ohio.*

This Bill of Exceptions, together with all objections and amendments filed thereto, transmitted by me to the Judges of the Court of Appeals, Licking County, Ohio, and Trial Judges of the case, Hon. R. M. Voorhees, Hon. R. S. Shields, and Hon. L. K. Powell, on the 7th day of November, A. D. 1914, being not less than ten days, nor more than fifteen days, after the date of the giving of notice aforesaid to counsel for plaintiff of the filing of this Bill of Exceptions.

[SEAL.] B. O. HORTON,
*Clerk of the Court of Appeals,*
*Licking County, Ohio.*

This Bill of Exceptions, together with all objections and amendments filed thereto, received on the 10th day of November, A. D. 1914, from the hands of the Clerk of the Court of Appeals, Licking County, Ohio.

97 And, this Bill of Exceptions being fully inspected and found to be true and correct in every respect, is allowed and signed on the 10th day of November, A. D. 1914, being within five days of its receipt by us, and the same is immediately transmitted by us, together with all objections and amendments filed thereto, on the 10th day of November, A. D. 1914, to the office of the Clerk of the Court of Appeals, Licking County, Ohio.

And, the said defendant, by counsel, requesting it, the same is hereby ordered to be made a part of the record in this case, but not to be spread at large upon the Journal, according to the statute in such case made and provided.

In witness whereof, we have hereunto set our hands this 10th day of November, A. D. 1914.

R. M. VOORHEES,
R. S. SHIELDS,
L. K. POWELL,
*Judges of the Court of Appeals, Licking Co., O., and Trial Judges of the Case.*

This Bill of Exceptions, together with all objections and amendments filed thereto, received from the hands of the Judges of the Court of Appeals, Licking County, Ohio, and Trial Judges of the case, on the 13th day of November, A. D. 1914.

B. O. HORTON,
*Clerk of the Court of Appeals, Licking County, Ohio.*

Filed in the Court of Appeals, Licking County, Ohio, on said last above-mentioned date.

B. O. HORTON,
*Clerk of the Court of Appeals, Licking County, Ohio.*

98 AAA.

*Valuation of Property of the Newark Natural Gas and Fuel Company, Newark, Ohio, by Samuel S. Wyer, Consulting Engineer, Columbus, Ohio.*

COLUMBUS, OHIO, May 1, 1914.

The Newark Natural Gas and Fuel Company, Newark, Ohio.

GENTLEMEN: After making a careful and detailed investigation of your natural gas distributing property at Newark, Ohio, it is my judgment that the value of this property for rate fixing purposes, as of April 1, 1914, in round numbers is $432,000 and that the value for the same purpose as of April 1, 1911, was substantially the same.

My reasons for arriving at these values are given in detail in the following pages. A map showing the location of all the gas mains in the streets is given at the back of this report.

The term "property" is used herein in the legal and economic sense as meaning "the absolute, entire and exclusive right to any-

thing," and embraces material things, labor or services and rights. For this reason no attention has been paid to first costs, purchase price from former owners, or outstanding securities. My view point has been the same as that expressed by the Supreme Court of Wisconsin (154 Wis., 144):

"The value of the plant and business is an indivisable gross
99 amount. It is not obtained by adding up a number of separate items, but by taking a comprehensive view of each and including all the elements of property, the tangible and intangible, including property rights, and considering them all, not as separate things, but inseparable parts of one harminous entity, and exercising judgment as to the value of that entity."

Various features of my valuation have been fortified by legal precedents as given on pages 11 to 30 herein.

Respectfully submitted,

SAMUEL S. WYER.

I. Plant Reproduction Cost Summary:

| | | |
|---|---|---|
| 1. | Real Estate | $425. |
| 2. | Low pressure gas mains | 123,898. |
| 3. | Medium pressure gas mains | 36,680. |
| 4. | High pressure gas mains | 54,750. |
| 5. | Gate Valves | 1,013. |
| 6. | Regulators and regulator fittings | 8,795. |
| 7. | Services | 45,111. |
| 8. | Meters | 47,887. |
| 9. | Shop and tools | 600. |
| 10. | Vehicles | 1,961. |
| 11. | Office Equipment | 2,209. |
| 12. | Pavement over mains | 33,379. |
| | Total | $356,708. |
| 13. | Promotion, legal, organization, superintendency, contingent, interest during construction, taxes during construction, 20% of sum of Items 1 to 12 | 71,342. |

For legal precedent for this value see p. 20.

Total Reproduction Cost of Plant.....$428,050.

100 II. Property Value Summary:

a. Present value of plant, allowing for appreciation, also for shrinkage due to depreciation, is estimated at 80% of production cost new.

80% of $428,050 ..... $342,440.

| | | |
|---|---|---|
| *b.* | Cost of developing business in acquiring 6,484 service connections, or the present going value of the property in excess of the "bare bones of the plant" and representing the difference between a "dead plant and a live one," is estimated at 17% of the reproduction cost of the plant, (for legal precedents for this allowance see p. 25) 17% of $428,050..... | 72,768. |
| *c.* | Total amount of material, stock and supplies on hand, April 1, 1914..... | 2,000. |
| | Total present value of property as of April 1, 1914 ..... | $417,208. |
| *d.* | Pages 25 to 27 show the legal precedents for working capital in rate cases, for this there is allowed.. | 15,000. |
| | Total value for rate making..... | $432,208. |

The threefold requirements for the rate of return that should be allowed on this valuation are given on pages 27 to 30.

101

## III. Detailed Reproduction Cost.

| | | | | | Reproduction cost new. |
|---|---|---|---|---|---|
| 1. Real Estate Used for Regulator Station Sites: | | | | | |
| Jefferson Street, 3-cornered tract, 50 ft. frontage, 75 ft. deep | | | | $100. | |
| Postle Avenue, 3-cornered tract, 45 ft. frontage, 90 ft. deep. | | | | 100. | |
| Franklin Avenue, square tract, 50 ft. x 50 ft..... | | | | 75. | |
| South Sixth Street, irregular shape, 27 ft. frontage, 102 ft. deep, and 78 ft. wide at rear..... | | | | 150. | |
| | | | | | 425. |
| 2. Low Pressure Gas Mains: | | | | | |
| This distributing plant is made up of bell and spigot cast iron mains with lead joints, and screwed steel or wro't-iron pipe, and plain end wro't-iron pipe or steel pipe with Dressar couplings. The exact lengths of each class cannot be determined, but the unit prices in this and the following two sections represent the fair average figure, including fittings used in connecting these mains. | | | | | |
| 375′ | 12″ | @ | $1.60..... | $600. | |
| 350′ | 10″ | @ | 1.30..... | 455. | |
| 1,850′ | 8″ | @ | 1.05..... | 1,942. | |
| 32,125′ | 6″ | @ | .70..... | 22,488. | |
| 102 3,575′ | 5⅝″ | @ | .70..... | 2,502. | |
| 6,000′ | 5″ | @ | .60..... | 3,600. | |
| 32,774′ | 4″ | @ | .50..... | 16,387. | |
| 108,002′ | 3″ | @ | .40..... | 43,201. | |
| 1,675′ | 2½″ | @ | .37..... | 620. | |
| 100,211′ | 2″ | @ | .32..... | 32,068. | |
| 125′ | 1½″ | @ | .28..... | 35. | |
| | | | | | 123,898. |

| | | | | | Reproduction cost new. |
|---|---|---|---|---|---|
| **3. Medium Pressure Gas Mains:** | | | | | |
| | 3,375′ | 10″ | @ $1.30 | 4,387. | |
| | 12,225′ | 6″ | @ .70 | 8,558. | |
| | 33,525′ | 4″ | @ .50 | 16,762. | |
| | 12,250′ | 3″ | @ .40 | 4,900. | |
| | 5,775′ | 2″ | @ .32 | 1,848. | |
| | 900′ | 1″ | @ .25 | 225. | |
| | | | | | 36,680. |
| **4. High Pressure Gas Mains:** | | | | | |
| | 8,800′ | 8″ | @ $1.05 | $9,240. | |
| | 10,375′ | 6″ | @ .70 | 7,263. | |
| | 2,625′ | 4″ | @ .50 | 1,313. | |
| | 3,300′ | 3″ | @ .40 | 1,320. | |
| | 4,685′ | 2″ | @ .32 | 1,499. | |
| | 60′ | 1″ | @ .25 | 15. | |
| 103 | 68,200′ | 4″ | (Known as Thurston line) @ .50 | 34,100. | |
| | | | | | $54,750. |

**5. Gate Valves:**

The following gate valves are iron body and tested to 600 pounds pressure. The unit prices used include transportation, haulage, and labor in setting.

| | | | | Unit prices. | |
|---|---|---|---|---|---|
| 1. | 10″ | flanged | @ $57 | $57. | |
| 3. | 8″ | screwed | @ 36 | 108. | |
| 4. | 6″ | " | @ 27 | 108. | |
| 10. | 6″ | flanged | @ 29 | 290. | |
| 21. | 4″ | screwed | @ 14 | 294. | |
| 11. | 3″ | " | @ 11 | 121. | |
| 5. | 2″ | " | @ 7 | 35. | |
| | | | | | 1,013. |

104

**6. Regulators and Regulator Fittings:**

The following includes the regulators in the distributing plant, and also those belonging to the company but used on various consumers' premises.

30. Regulator houses—
5 of these are artificial stone, 6′ x 6′ inside, 7′ high with slate roof.
8 are brick 8′ x 9′ inside, 8′ high, with slate roof.
7 are made of tile 7′ x 7′ inside, 7′ high, with iron roof.
10 are frame, 5′ x 6′ inside, 6′ high, with iron or slate roofs.
Labor and material for each regulator house taken at $50.00. 30 x $50 ..... $1,500.
20. 3′ x 3′ frame boxes over factory regulators @ $6.00 ..... 120.

Forward ..... $1,620.

105 Reproduction cost new.

6. Regulators and Regulator Fittings—(Con.) Forward..... $1,620.

| | | | Unit prices. | |
|---|---|---|---|---|
| 1—8" | x 8" | Low Pressure Chaplin-Fulton... @ | $158. | 158. |
| 3—6" | x 8" | " " " " ... @ | 105. | 315. |
| 1—6" | x 6" | " " " " ... @ | 105. | 105. |
| 7—4" | x 6" | " " " " ... @ | 63. | 441. |
| 7—4" | x 4" | " " " " ... @ | 63. | 441. |
| 10—3" | x 4" | " " " " ... @ | 63. | 630. |
| 1—3" | x 3" | " " " " ... @ | 63. | 63. |
| 14—2" | x 2" | " " " " ... @ | 28. | 392. |
| 1—1½" | x 1¼" | " " " " ... @ | 18. | 18. |
| 9—1" | x 1" | " " " " ... @ | 14. | 126. |
| 1—8" | x 8" | High " " " ... @ | 158. | 158. |
| 1—6" | x 6" | " " " " ... @ | 105. | 105. |
| 4—4" | x 4" | " " " " ... @ | 63. | 252. |
| 1—3" | x 3" | " " " " ... @ | 63. | 63. |
| 5—2" | x 2" | " " " " ... @ | 28. | 140. |
| 3—8" | Flange Gate Valves 600# test pressure | | @ 38. | 114. |
| 9—6" | " " " " " " | | @ 28. | 252. |
| 25—4" | " " " " " " | | @ 15. | 375. |
| 6—6" | Screw " " " " " | | @ 25. | 150. |
| 3—8" | " " " " " " | | @ 35. | 105. |
| 16—4" | " " " " " " | | @ 13. | 208. |
| 106 | | | | |
| 24—3" | " " " " " " | | @ 10. | 240. |
| 18—3" | " " " " " " | | @ 6. | 108. |
| 12—2" | Stop Cocks ..... | | @ 2. | 24. |
| 1—1½" | " " ..... | | @ 1.25 | 1.25 |
| 2—1¼" | " " ..... | | @ 1. | 2. |
| 6—8" | Tees Heavy ..... | | @ 7. | 42. |
| 23—6" | " " ..... | | @ 3. | 69. |
| 42—4" | " " ..... | | @ 1.50 | 63. |
| 27—3" | " " ..... | | @ .75 | 20.25 |
| 34—2" | " " ..... | | @ .30 | 10.20 |
| 8—8" | Ells " ..... | | @ 4. | 32. |
| 20—6" | " " ..... | | @ 2.50 | 50. |
| 48—4" | " " ..... | | @ 1. | 48. |
| 34—3" | " " ..... | | @ .65 | 22.10 |
| 50—2" | " " ..... | | @ .25 | 12.50 |
| 16—8" | Nipples ..... | | @ .80 | 12.80 |
| 25—6" | " ..... | | @ .55 | 13.75 |
| 55—4" | " ..... | | @ .25 | 13.75 |
| 51—3" | " ..... | | @ .15 | 7.65 |
| 73—2" | " ..... | | @ .07 | 5.11 |
| 1—8" | x 4" Swedged Nipple..... | | @ 3.85 | 3.85 |
| 2—6" | x 4" " " ..... | | @ 1.70 | 3.40 |
| 3—4" | x 3" " " ..... | | @ .90 | 2.70 |
| 1—4" | x 2" " " ..... | | @ 1.10 | 1.10 |
| 6—3" | x 2" " " ..... | | @ .70 | 4.20 |
| 107 | | | | |
| 1—6" | Flange Union ..... | | @ 1. | 1. |
| 12—3" | " " ..... | | @ .25 | 3. |
| | Forward..... | | | $7,047.61 |

| | | | Reproduction cost new. |
|---|---|---|---|
| 6. Regulators and Regulator Fittings—(Con.) Forward..... | | | $7,047.61 |
| | | Unit prices. | |
| 14—2" Lip Unions ..... | @ | $0.40 | 5.60 |
| 1—8" Plug Heavy ..... | @ | .80 | .80 |
| 8—6" " " ..... | @ | .40 | 3.20 |
| 21—4" " " ..... | @ | .15 | 3.15 |
| 18—3" " " ..... | @ | .08 | 1.44 |
| 5—2" " " ..... | @ | .03 | .15 |
| 5—4" x 6" Bushings ..... | @ | .25 | 1.25 |
| 2—3" x 4" " ..... | @ | .15 | .30 |
| 2—2" x 4" " ..... | @ | .21 | .42 |
| 3—2" x 3" " ..... | @ | .06 | .18 |
| 1—6" Safety Valve with Lever..... | @ | 21. | 21. |
| 10—4" " " " " ..... | @ | 10. | 100. |
| 2—3" " " " " ..... | @ | 6.50 | 13. |
| 5—2" Pop " " ..... | @ | 5. | 25. |
| 1—8" Dresser Coupling ..... | @ | 2.50 | 2.50 |
| 2—4" " " ..... | @ | 1.25 | 2.50 |
| 3—3" " " ..... | @ | 1.10 | 3.30 |
| 108 | | | |
| 13—2" " " ..... | @ | .70 | 9.10 |
| 1—8" Ashley & Rogers Screen..... | @ | 1.50 | 1.50 |
| 9—4" " " " " ..... | @ | 1. | 9. |
| 10—3" " " " " ..... | @ | .75 | 7.50 |
| 2—2" " " " " ..... | @ | .50 | 1. |
| 11—200# 6" Spring Gauges..... | @ | 2.10 | 23.10 |
| 22—3# U Mercury " ..... | @ | 2. | 44. |
| The following pipe is used in connecting the regulators: | | | |
| 64'—8" Linepipe ..... | @ | .70 | 44.80 |
| 155'—6" " " ..... | @ | .47 | 72.85 |
| 382'—4" " " ..... | @ | .27 | 103.14 |
| 201'—3" " " ..... | @ | .18 | 36.18 |
| 125'—2" " " ..... | @ | .09 | 11.25 |
| Labor in installing regulators..... | | | 1,200. |
| | | | $8,795. |

7. Services:

The services vary as shown below. Records were available showing the exact number of each size, and the average lengths were computed by determining the mean average length from the company's records. The unit prices below include not only the labor, but the pipe and all fittings used in connection with the service as well as recognition of the fact that the majority of these services have been installed on a piecemeal basis, which makes them more expensive and that many of them have been laid by cutting through
109 pavements.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 112—1" | Services, | av. | length | 27'..... | 3,060' | @ .25 | 765. |
| 5,132—1¼" | " | " | " | 24'..... | 125,804' | @ .26 | 32,709. |
| 1,063—1½" | " | " | " | 31'..... | 33,207' | @ .28 | 9,298. |
| 169—2" | " | " | " | 41'..... | 6,851' | @ .32 | 2,192. |
| 1—2½" | " | " | " | 11'..... | 11' | @ .37 | 4. |
| 7—3" | " | " | " | 51'..... | 357' | @ .40 | 143. |
| | | | | | | | 45,111. |

Reproduction cost new.

8. Meters:

The following prices on meters include transportation, testing, labor in setting, and fittings used in connecting meters to the service lines and consumers' fixtures:

| | | Unit prices. | |
|---|---|---|---|
| 97— | Tin 3-lt. @ | $6.60 | $640. |
| 113— | " 5-lt. @ | 6.90 | 780. |
| 1,343— | " 10-lt. @ | 8.50 | 11416. |
| 125— | " 20-lt. @ | 11. | 1375. |
| 2— | " 30-lt. @ | 14.55 | 29. |
| 649— | " 5-A lt. @ | 7.50 | 4867. |
| 25— | Ironcase A. @ | 8.50 | 213. |
| 395— | Iron # 2 @ | 10. | 3950. |
| 907— | " # 3 @ | 10. | 9070. |
| 110 | | | |
| 916— | " # 1 @ | 8.50 | 7786. |
| 483— | " # 0 @ | 8.50 | 4105. |
| 12— | " # 4 @ | 15.50 | 186. |
| 6— | " # 5 @ | 15.70 | 94. |
| 16— | " # 8 @ | 18.30 | 293. |
| 24— | " #12 @ | 42. | 1008. |
| 7— | " #25 @ | 83. | 581. |
| 4— | " #50 @ | 51.50 | 206. |
| 2— | " 3" 6 "M" hr. @ | 113.50 | 227. |
| 4— | " 6" 20 "M" " @ | 186.50 | 746. |
| 1— | " 8" 50 "M" " @ | 315. | 315. |
| 5,131 | | | $47,887. |

9. Shops and Tools:

The tools, including the gas meter prover and measurement appliances used in the distributing department are estimated at... 600.

10. Vehicles:

| | |
|---|---|
| 1—Bicycle | $25. |
| 1—1-Ton Service Motor Truck solid tires, gasoline engine, long body, with top | 1,500. |
| 1—Platform spring-wagon | 110. |
| 1—Top-buggy with extension body at rear | 65. |
| 1—Single buggy harness | 16. |
| 1—Single wagon harness | 20. |
| 111 | |
| 1—Bay horse | 225. |
| | 1,961. |

| | Reproduction cost new. | |
|---|---|---|
| 11. Office Equipment: | | |
| 1—58" Roll top desk, plain oak | $40. | |
| 1—54" roll top desk, plain oak | 38. | |
| 1—48" flat top desk, plain oak | 35. | |
| 1—38" flat top typewriter desk, plain oak | 20. | |
| 2—84" single, book-keepers' standing desk, plain oak | 60. | |
| 1—84" double, book-keepers' standing desk, plain oak | 45. | |
| 1—72" table, plain oak | 15. | |
| 4—high stools | 6. | |
| 3—Revolving chairs | 15. | |
| 2—Straight back chairs | 4. | |
| 1—Settee | 5. | |
| 1—Letter-copying press and plain oak stand | 20. | |
| 1—Copy book cabinet | 5. | |
| 1—15-drawer horizontal letter file cabinet, plain oak | 15. | |
| 1—Burroughs visible, 17-blank, electric, variable split adding machine, mounted on metal stand | 630. | |
| 1—Addressograph in plain oak cabinet, 7,056 names | 325. | |
| 1—Cashier's Counter with built in pay window and cabinets | 300. | |
| 1—Barnes Double door safe, with combination lock. Interior 48" x 30" x 20", fitted with special combination lock money safe. 112 | 265. | |
| 1—Double metal vault doors | 125. | |
| 1—Electrically controlled clock | 25. | |
| 1—Seth Thomas wall clock | 15. | |
| 1—15", 110 volt, 60 cycle, A. C. electric fan | 21. | |
| 1—12", 110 volt, 60 cycle, A. C. electric fan | 18. | |
| 2—Gas Bill cancelling machines | 30. | |
| 2—Coin stacks | 26. | |
| 1—Pencil sharpener | 8. | |
| 1—Check Protectograph | 30. | |
| 1—Rubber stamp set for marking gas bills | 18. | |
| Miscellaneous features, such as record books, etc. | 50. | |
| | | $2,200. |

12. Pavements over Mains:

The basis of value provided for public utilities by Sec. 499-9, Paragraph D. of the Ohio Public Utilities law is:

"The cost of new production as of a date certain, of all the physical property other than land, owned and used by such public utility or railroad, showing the values of the separate items comprising such property, together with the unit basis of such valuation."

This is simply the reproduction cost of the plant, and it is therefore necessary to consider the cost of cutting through all 113 & 114 pavements where mains are laid under pavements. No accurate records are available as to the exact lineal feet of mains that were laid prior to the laying of the pavements. However in considering the value of the property as property it is necessary to include the length of all mains now under existing pavements, because this is a form of "property that is capable of ownership and entitled to protection." The unit prices used below include — only the cost of cutting through the pavements, but also the replacing of the pavements in first class condition after the main has been laid.

| | |
|---|---|
| 75,551 feet of mains under brick pavement with gravel base and sand and cement filled @ 40¢ per lineal foot | $30,220. |
| 2,713 feet of mains under brick pavement cement filler and 6" thick concrete base @ 65¢ per lineal foot | 1,763. |
| 1,994 feet of mains under asphalt pavement @ 70¢ per lineal foot. | 1,396. |
| | $33,379. |

(Here follows paster, marked pages 115 and 116.)

Total Investments, as appears by Union Natural Gas Corporation's Annual Statement. The

| | Inventory | Dec. 1902 | Dec. 1903 | Dec. 1904 | Dec. 190 |
|---|---|---|---|---|---|
| Newark City. | | | | | |
| Lands in fee | 800 00 | 800 00 | 1,026 25 | 1,026 25 | 1,026 25 |
| Rights of way | 3,500 00 | 60,000 00 | 60,000 00 | 60,015 00 | 60,018 25 |
| " " " expenses | | | | 15 40 | 1,837 81 |
| Office furniture & fixtures | 1,179 55 | 1,144 55 | 1,220 20 | 1,326 10 | 1,412 80 |
| Gas meters, | 7,571 33 | 8,126 58 | 34,324 09 | 39,633 64 | 41,925 89 |
| Main to curb | 18,109 61 | 19,215 63 | 21,512 38 | 24,291 53 | 27,118 26 |
| Buildings ) | | 1,181 00 | 1,184 04 | 1,195 34 | 1,270 14 |
| Fittings, large ) | | 2,073 84 | 2,275 03 | 2,435 95 | 2,788 01 |
| " small ) | | 272 67 | 320 69 | 392 80 | 418 43 |
| Other materials ) | 91,478 47 | 1,694 19 | 1,941 48 | 2,071 38 | 2,264 73 |
| Labor ) | | 17,553 03 | 18,044 62 | 18,954 03 | 20,155 48 |
| Gas Receivers & Regulators ) | | 2,158 79 | 2,249 79 | 2,392 79 | 2,595 79 |
| Pipe Line, ) | | 68,967 68 | 70,449 08 | 73,922 23 | 79,587 71 |
| | 122,638 96 | 183,187 96 | 214,547 65 | 227,672 44 | 242,419 55 |
| Main Line. | | | | | |
| Rights of way | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 |
| " " " expenses | | | | | |
| Fittings, large | 80 71 | 80 71 | 80 71 | 80 71 | 80 71 |
| " small | 18 04 | 18 04 | 18 04 | 18 04 | 18 04 |
| Labor, | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 |
| Pipe Line, | 197,842 65 | 197,842 65 | 178,834 65 | 178,834 65 | 178,834 65 |
| | 235,922 27 | 235,922 27 | 216,914 27 | 216,914 27 | 216,914 27 |
| Field. | | | | | |
| Leaseholds, 7137 acres | 31,337 00 | 214,110 00 | 214,110 00 | 214,110 00 | |
| Wells | 30,752 65 | 31,773 29 | 39,741 27 | 42,453 21 | |
| Labor | | 36,000 00 | 36,041 68 | 36,052 68 | |
| Pipe Line | | | 32 16 | 32 16 | |
| | 62,089 65 | 281,883 29 | 289,925 11 | 292,648 05 | |

EXHIBIT BBB.

INVESTMENTS BY SUB-ACCOUNTS

Years 1902-1911 inclusive.

UNION GAS CORPORATION

...s by Union Natural Gas Corporation's Annual Statement. The increase or decrease during any calendar year, will be ascertained by comparison with other annual figures.

| Inventory | Dec. 1902 | Dec. 1903 | Dec. 1904 | Dec. 1905 | Dec. 1906 | Dec. 1907 | Dec. 1908 | Dec. 1909 | Dec. 1910 | Dec. 1911 |
|---|---|---|---|---|---|---|---|---|---|---|
| 800 00 | 800 00 | 1,026 25 | 1,026 25 | 1,026 25 | 1,026 25 | 1,026 25 | 1,626 25 | 1,626 25 | 1,626 25 | 1,626 25 |
| 3,500 00 | 60,000 00 | 60,000 00 | 60,015 00 | 60,018 25 | 60,023 25 | 60,023 25 | 60,023 25 | 60,023 25 | 60,023 25 | 60,023 25 |
| | | | 15 40 | 1,837 81 | 3,639 16 | 5,437 66 | 5,437 66 | 5,437 66 | 5,437 66 | 5,437 66 |
| 1,179 55 | 1,144 55 | 1,220 20 | 1,326 10 | 1,412 80 | 1,429 20 | 1,447 20 | 1,693 18 | 1,748 58 | 1,753 58 | 1,759 58 |
| 7,571 33 | 8,126 58 | 34,324 09 | 39,633 64 | 41,925 89 | 43,116 65 | 36,429 89 | 36,493 74 | 38,769 34 | 41,293 46 | 42,458 86 |
| 18,109 61 | 19,215 63 | 21,512 38 | 24,291 53 | 27,118 26 | 29,320 52 | 30,598 11 | 31,708 89 | 32,503 28 | 33,158 33 | 34,010 33 |
| | 1,181 00 | 1,184 04 | 1,195 34 | 1,270 14 | 1,307 98 | 1,404 54 | 1,482 92 | 1,493 67 | 1,522 35 | 1,540 95 |
| | 2,073 84 | 2,275 03 | 2,435 95 | 2,788 01 | 2,925 41 | 2,958 35 | 2,885 10 | 2,902 24 | 2,929 47 | 2,944 54 |
| | 272 67 | 320 69 | 392 80 | 418 43 | 437 63 | 431 17 | 463 16 | 473 45 | 474 75 | 482 08 |
| 91,478 47 | 1,694 19 | 1,941 48 | 2,071 38 | 2,264 73 | 2,525 84 | 2,518 64 | 2,501 74 | 2,526 07 | 2,526 07 | 2,526 07 |
| | 17,553 03 | 18,044 62 | 18,954 03 | 20,155 48 | 21,247 04 | 21,787 50 | 22,289 31 | 22,481 36 | 22,603 36 | 22,673 03 |
| | 2,158 79 | 2,249 79 | 2,392 79 | 2,595 79 | 2,769 79 | 2,696 79 | 2,565 79 | 2,576 79 | 2,552 79 | 2,643 79 |
| | 68,967 68 | 70,449 08 | 73,922 23 | 79,587 71 | 83,499 86 | 84,954 27 | 86,348 35 | 86,894 99 | 87,381 38 | 87,306 95 |
| 122,638 96 | 183,187 96 | 214,547 65 | 227,672 44 | 242,419 55 | 253,268 58 | 251,713 62 | 255,519 34 | 259,456 93 | 263,282 70 | 265,633 34 |
| 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | 11,520 00 | | | |
| | | | | | | 7 50 | 7 50 | | | |
| 80 71 | 80 71 | 80 71 | 80 71 | 80 71 | 80 71 | 80 71 | 80 71 | | | |
| 18 04 | 18 04 | 18 04 | 18 04 | 18 04 | 18 04 | 18 04 | 18 04 | | | |
| 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | 26,460 87 | | | |
| 197,842 65 | 197,842 65 | 178,834 65 | 178,834 65 | 178,834 65 | 178,834 65 | 178,834 65 | 178,834 65 | 37,255 68 | 37,255 68 | 37,255 68 |
| 235,922 27 | 235,922 27 | 216,914 27 | 216,914 27 | 216,914 27 | 216,914 27 | 216,921 77 | 216,921 77 | 37,255 68 | 37,255 68 | 37,255 68 |
| | | | | | | Less | 37,255 68 | | | |
| 31,337 00 | 214,110 00 | 214,110 00 | 214,110 00 | | | | 179,666 09 | | | |
| 30,752 65 | 31,773 29 | 39,741 27 | 42,453 21 | | | | | | | |
| | 36,000 00 | 36,041 68 | 36,052 68 | | | | | | | |
| | | 32 16 | 32 16 | | | | | | | |
| 62,089 65 | 281,883 29 | 289,925 11 | 292,648 05 | | | | | | | $302 889 02 |

| | | |
|---|---|---|
| Net Inventory, Newark plant, Dec. 31, 1911 | | $365,633.34 |
| " " " " Jan. 1, 1902 | | 122,638.96 |
| " increase, " " | | $142,994.38 |
| Increase, from Inventory in | | |
| Lands in fee | 826.25 | |
| Rights of way | 56,523.25 | |
| Right of way expenses | 5,437.66 | |
| Office furniture and fixtures | 580.03 | |
| Gas meters | 34,887.53 | |
| Main to curb | 15,900.72 | 114,155.44 |
| Increase in other items | | 28,838.94 |

Rights of way are the capitalized value of the franchise.
Right of way expenses are the capitalized values of free gas furnished the city.
As to "other items" showing an increase of $28,838.94 were not distributed in the Inventory, the increase from Dec. 1902 alone can be shown:

| | | |
|---|---|---|
| Buildings, | 359.95 | |
| Fittings, large | 870.70 | |
| " small | 209.41 | |
| other materials | 831.88 | |
| Labor, | 5,120.00 | |
| Gas Receivers & Regulators | 485.00 | |
| Pipe Line, | 18,539.27 | 26,416.21 |
| Enumerated items in above statement | | 2,422.73 |

Only two changes were made in "Main Line" account. In Jany. 1903 12 miles of 4" line was taken up, the material sold to Logan Co. and "Pipe Line" credited $19,008.00. In 1907 the account was increased $7.50 on a charge to "Right of Way Expenses."

| | | | |
|---|---|---|---|
| The Inventory aggregated | | $235,922.27 | |
| Line taken up valued | $19,008.00 | | |
| Thurston Line " | 37,255.68 | 56,263.68 | |
| | | 179,658.59 | |
| Increase by Right of Way Expenses | | 7.50 | $179,666.09 |

In Feby. 1909 a voucher was made Crediting the account and charging Logan Co. with $179,666.09

EXHIBIT CCC.

## NEWARK EXPENSES BY SUB-ACCOUNTS

Years 1902-1911 inclusive.

Expenses, Calendar Years, from June 1, 1902

| | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Newark City** | | | | | | | | | | |
| Changing Construction | 20 55 | 25 50 | | 510 57 | 208 88 | 334 37 | 505 50 | 706 88 | 368 34 | 120 86 |
| Repairs, Lines | 71 21 | 325 31 | 432 93 | 2641 61 | 3028 98 | 1516 53 | 1694 53 | 1949 10 | 1172 16 | 1265 67 |
| " Meters | 12 00 | 3 30 | 58 08 | 69 15 | 191 24 | 1082 24 | 1203 95 | 2327 23 | 2041 40 | 2342 80 |
| " Buildings | | | 5 87 | 51 14 | 1 62 | 2 35 | 6 86 | 2 40 | | |
| Operating Lines | 1,338 92 | 3480 14 | 6373 19 | 7421 60 | 6095 76 | 5160 68 | 5555 94 | 4971 82 | 5038 22 | 4749 53 |
| Rentals | 84 00 | 186 00 | 114 90 | 141 50 | 120 00 | 100 00 | 170 00 | 160 00 | 170 00 | 170 00 |
| Taxes | 548 93 | 1091 48 | 1112 15 | 1133 26 | 1196 92 | 1293 26 | 1349 94 | 1503 08 | 1642 06 | 4227 46 |
| Damages | 32 12 | 15 00 | 785 95 | 1666 46 | 238 90 | 39 85 | | 3525 89 | | |
| Tools & Supplies | 176 94 | 182 10 | 310 13 | 625 66 | 611 60 | 443 83 | 429 78 | 363 63 | 294 80 | 299 99 |
| Office | 2744 57 | 4660 28 | 5237 00 | 6836 46 | 7029 76 | 6750 47 | 6952 13 | 6459 51 | 6296 25 | 6405 15 |
| Salaries & Expenses Officers Supts. | 117 87 | 138 34 Cred | 143 56 | | | | | | | |
| Miscellaneous | 308 38 | 175 37 | 62 00 | 343 82 | 30 04 | 358 93 | 109 60 | 95 50 | 102 00 | 70 80 |
| Telegraph & Telephone | | 209 94 | 187 97 | 198 62 | 163 97 | 169 20 | 137 70 | 151 03 | 156 13 | 165 70 |
| Legal | | 50 82 | 21 57 | 25 00 | | 170 00 | | | | 243 00 |
| Warehouse Expenses | | 264 66 | 435 43 | 383 85 | 313 74 | 130 17 | 148 56 | 157 37 | 92 68 | 69 59 |
| Interest & Exchange. | | | 13 25 | | 5 48 | 63 02 | 321 40 | 3,332 47 | 1392 67 | 1544 90 |
| | | | 15,150 42 | | | | | | | |
| | 5,455 49 | 10,808 24 | 143 56 | 22,048 70 | 19,236 89 | 17,614 90 | 18,585 89 | 25,705 91 | 18,766 71 | 21,675 45 |
| | | | 15 006 86 | | | | | | | |
| **General Expenses** | | | | | | | | | | |
| Taxes | | 1,204 49 | 1,960 21 | 568 30 | 607 83 | 681 51 | 946 09 | 668 93 | 3,193 47 | 1,430 16 |
| Telegraph & Telephone | 1 29 | 14 94 | 33 09 | 29 77 | 19 16 | 17 03 | 18 65 | 16 72 | 17 02 | 15 85 |
| Interest and Exchange | | 1,357 26 | 414 08 | 5 49 | 1 91 | 18 71 Cred. | 12 93 | | | |
| Office, | 204 88 | 637 24 | 1268 63 | 1169 32 | 967 48 | 1091 27 | 1118 62 | 1179 79 | 1,165 14 | 1,109 53 |
| Salaries & Expenses Officers & Superintendents | 160 87 | 1,695 24 | 1781 01 | 1436 54 | 1158 68 | 1237 86 | 1619 09 | 1383 56 | 1,571 32 | 1,653 86 |
| Legal | | 232 53 | 176 30 | 313 43 | 144 85 | 590 64 | 489 49 | 430 21 | 397 74 | 504 35 |
| Miscellaneous | 62 | | | 50 95 | 156 81 | 362 12 | 461 51 | 563 23 | 424 61 | 454 03 |
| Auditing Expenses | | | | | | | | 340 40 | 319 82 | 366 40 |
| | | | | | | | 4,653 45 | | | |
| | 367 66 | 5,141 70 | 5,633 32 | 3,573 80 | 3,056 72 | 3,999 14 | 12 93 | 4,582 84 | 7,089 12 | 5,534 18 |
| | | | | | | | 4,640 52 | | | |
| **Field Expenses** | | | | | | | | | | |
| Drilling Wells | 6,463 59 | 13,782 48 | 14,349 63 | 4,440 50 | | | | | | |
| Changing Construction | | 70 00 | 1,753 33 | 606 57 | | | | | | |
| Repairs, Wells | | 1,123 93 | 28 51 | 46 94 | | | | | | |
| " Lines | | | 3 95 | | | | | | | |
| Rentals | 416 50 | 6,998 83 | 6,779 40 | 3,332 30 | | | | | | |
| Taxes | 280 90 | 232 17 | 435 57 | 199 53 | | | | | | |
| Telegraph & Telephone | 1 00 | | | | | | | | | |
| Operating Lines | | 50 35 | 3 20 | 28 00 | | | | | | |
| " Wells, | | 118 96 | 471 60 | 491 53 | | | | | | |
| | 7,161 99 | 22,376 72 | 23,825 19 | 9,145 37 | | | | | | |
| **Main Line Expenses** | | | | | | | | | | |
| Changing Construction | | 23 20 | | | | | | | | |
| Repairs Line | 7 60 | | | 14 14 | | | | | | |
| Rentals | | 60 00 | 120 00 | 120 00 | 60 00 | 69 00 | 99 00 | | | |
| Taxes | | 247 88 | 204 41 | 204 23 | 389 55 | 390 92 | 413 89 | 244 81 | 75 96 | 71 87 |
| | 7 60 | 331 08 | 324 41 | 338 37 | 449 55 | 459 92 | 512 89 | 244 81 | 75 96 | 71 87 |

### RECAPITULATION.

| Year | Newark City | General Expenses | Field Expenses | Main Line Exp. |
|---|---|---|---|---|
| 1902 | 5,455 49 | 367 66 | 7,161 99 | 7 60 |
| 1903 | 10,808 24 | 5,141 70 | 22,376 72 | 331 08 |
| 1904 | 15,006 86 | 5,633 32 | 23,825 19 | 324 41 |
| 1905 | 22,048 70 | 3,573 80 | 9,145 37 | 338 37 |
| 1906 | 19,236 89 | 3,056 72 | | 449 55 |
| 1907 | 17,614 90 | 3,999 14 | | 459 92 |
| 1908 | 18,585 89 | 4,640 52 | | 512 89 |
| 1909 | 25,705 91 | 4,582 84 | | 244 81 |
| 1910 | 18,766 71 | 7,089 12 | | 75 96 |
| 1911 | 21,675 45 | 5,534 18 | | 71 87 |
| | 174,905 04 | 43,619 00 | 62,509 27 | 2,816 46 |

Summary:

| | | |
|---|---|---|
| Newark City | 174,905.04 | |
| General Expenses. | 43,619.00 | |
| Field | 62,509.27 | |
| Main Line | 2,816.46 | 283,849.77 |

"Salaries and Expenses of Officers and Superintendents" Ceased to be an Expense of Newark in 1904 and was made a General Expense item.

The large sum charged for "Interest and Exchange", commencing 1909, was interest on Meter deposits and refunders.

117 EXHIBIT AA.

THE STATE OF OHIO,
*Licking County, ss:*

In the Court of Common Pleas, January Term, A. D. 1913.

Hon. H. W. Jewell, Judge.

No. 16000.

THE CITY OF NEWARK, OHIO, Plaintiff,
vs.
THE NEWARK NATURAL GAS AND FUEL COMPANY, Defendant.

Appearances: Roderic Jones, City Solicitor; Kibler & Kibler; and Frank A. Bolton, on behalf of Plaintiff. Fitzgibbon & Montgomery; and Judge S. M. Douglass, on behalf of Defendant.

*Transcript of Stenographic Notes.*

After the statement of the case by counsel, the following proceedings were had:

By Edward Kibler: There was a notice published in the newspapers. If you will allow us to introduce the notice without making formal proof——

By J. R. Fitzgibbon: The notice published in the newspapers in March?

By Edward Kibler: Yes sir.

By J. R. Fitzgibbon: Yes that is all right.

(See page 5 for a copy of said notice.)

118 By Edward Kibler: I would like to know the number of contracts that the company had at the time that the ordinance was passed.

By J. R. Fitzgibbon: Well, we will furnish you with that information.

By Edward Kibler: Will you admit that the company had a rule to shut off the gas if it was not paid for?

By J. R. Fitzgibbon: Yes, sir that rules applies.

By Judge Douglass: Whatever the rule is, it may be admitted.

By J. R. Fitzgibbon: After reasonable notice, it was shut off. If it was not paid for—when it was delinquent.

By Edward Kibler: And it is conceded that you refused to accept the rates, or the provision under the franchise of March 6, 1911?

By J. R. Fitzgibbon: Yes, sir.

By Edward Kibler: And you refuse to accept them, and you have refused?

By J. R. Fitzgibbon: Yes, sir.

By Judge Douglass: Yes, sir, and we still refuse.

(The witnesses for the plaintiff were called and sworn.)

119 FRANK NEIGHBOR.

Direct examination.

Examined by Edward Kibler:

Q. Your name is Frank Neighbor?
A. Yes, sir, it is.
Q. You have copies of the Newark Daily American Tribune?
A. Yes, sir.

By Edward Kibler: I am reading from the issue of Tuesday, March 14, 1911, page 7 of the issue of that day. (He reads):

*"Notice to Consumers of Natural Gas.*

"Commencing with the April, 1911, meter readings and until further notice, the rate charged for gas to domestic consumers will be twenty-five (25¢) cents per thousand cubic feet, subject to a discount of two and one-half (2½) cents per thousand cubic feet, if paid on or before the 10th of the month following that in which the gas is used.

"THE NEWARK NATURAL GAS AND FUEL COMPANY.

"March 10th, 1911." "3-10mwfilt."

That was published Tuesdays and Fridays beginning on the 14th of March, 1911, for eleven consecutive times, as shown by this record.

Q. Is it a fact that the notice was published in the paper for eleven consecutive times on Tuesdays and Fridays succeeding that day?
A. Yes, sir. It was ordered published until it was forbidden, and it was forbidden after the eleventh insertion.
Q. Who had that published?
A. The local manager of the Gas Company.
120 Q. Who paid for it?
A. The Newark Natural Gas and Fuel Company?
Q. Your paper was published and printed and circulated in this City?
A. Yes, sir.
Q. Of general circulation in this City?
A. Yes, sir.

By J. R. Fitzgibbon: That is admitted.

HAROLD FRANKLIN, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Edward Kibler:

Q. You are the Clerk of the Council of the City of Newark?
A. Yes, sir.
Q. You have charge of the records of the Council?
A. Yes, sir.
Q. Will you produce the original ordinance, granting a franchise to the Newark Natural Gas and Fuel Company?

(Witness gets book.)

A. Yes, sir, I have it.
Q. Where is that recorded?
A. Is is in Ordinance Book No. 13, page 514.

By Edward Kibler: I will introduce that in evidence. (A true copy of said ordinance will be found at page 5 et seq. of the transcript of the evidence taken on the trial in the Court of Appeals.)

Q. Have you any record of the acceptance by the Newark Natural Gas and Fuel Company of the terms of that ordinance?
A. There is an ordinance establishing the rate.
121 Q. Well, I am asking about the acceptance.
A. Yes, sir, March 18, 1898.
Q. What page is it?
A. Page 524, Volume 13.

By Edward Kibler: I will read it. (He reads in evidence):

"COUNCIL CHAMBER, NEWARK, OHIO,
"March 21, 1898.

"Regular meeting, Pres. Jones, presiding.
Present: Bourner, Downey, Fristoe, Irwin, Jones, Kuhn, McCoun, Redman, Ritzer and Slanker—10.
"Minutes of last regular and special meeting were read and approved. A communication signed by Wing and Robbins asking permission to build a fruit stand on Patten's corner was read and referred to the street committee.

"*Acceptance of Natural Gas Franchise.*

"To the City Council of Newark, Ohio, and to the City of Newark, O.:

"The Newark Natural Gas and Fuel Company, a corporation organized under the laws of the State of Ohio, for itself and its successors and assigns, accept- the provisions of an ordinance of the City Council of the City of Newark, Ohio, entitled 'An Ordinance granting to the Newark Natural Gas and Fuel Company the right and privilege of laying pipes in and through the streets, alleys, ave-

nues, bridges and public grounds and places of the City of Newark, Ohio, for the purpose of conveying and supplying natural gas or fuel gas to the consumers thereof for a period of ten years and repealing an ordinance passed by the City Council of Newark, Ohio, on April 23, 1888, granting to E. H. Everett and his associates the privilege of using the streets, lanes, etc., of said City for
122 the purpose of laying pipes and conveying through them in said City natural gas or oil and regulating the price therefor passed Feb. 21, 1898.

"THE NEWARK NATURAL GAS AND FUEL CO.,
By E. H. EVERETT, *President,*
A. P. TAYLOR, *Secretary.*"

Newark, Ohio, M'ch 18, 1898."

Q. You have an ordinance passed in 1911?
A. Yes, sir.
Q. Have you the journal or minutes of the Council?
A. Passed March 6, 1911. Ordinance No. 2123.
Q. What record is that?
A. Ordinance Book No. 15, page 405.
Q. When was that ordinance introduced?
A. It was passed March 6, 1911.
Q. Is that the record of ordinances?
A. Yes, sir, this is the record of ordinances.
Q. Will you be kind enough to read it?

(He reads):
(From Vol. 15, Journal of Ordinances, City of Newark, Ohio, page 405):

"*Ordinance No.* 2123.

"By Baker, Vogelmeier, Muenz, Stare, Prior, Elsner—Regulating and fixing the price The Newark Natural Gas and Fuel Company, its successors or assigns, may charge for natural gas for light and fuel in the City of Newark, Ohio.

"Be it ordained by the Council of the City of Newark, State of Ohio.

"Sec. 1. For a period of five years next ensuing the City of Newark, Ohio, hereby establishes, fixes and regulates the price
123 The Newark Natural Gas and Fuel Company, its successors or assigns may charge for natural gas for light and fuel to all persons, firms or corporations using or consuming the same at twenty cents per thousand for each thousand cubic feet of gas used or consumed. Provided, however, such price is subject to a discount of ten per cent for all persons, firms and corporations paying for the same on or before the tenth day of each month for such natural gas consumed the month previous thereto. The price herein fixed is the maximum said company may charge.

"Sec. 2. This ordinance shall take effect and be in force from and after the earliest period allowed by law.

Passed March 6th, 1911.

"ELMER ORR,
*President of Council.*

Attest:
JAMES McCARTHY, *Clerk.*

Approved by the Mayor this 9th day of March, 1911.
JOHN M. ANKELE, *Mayor.*

"I, James McCarthy, Clerk of Council, do hereby certify that the above ordinance was published in the Newark Advocate and the American Tribune, two newspapers of general circulation and opposite politics in the City of Newark, Ohio, on the 13th and 20th days of March, 1911.

"JAMES McCARTHY,
*Clerk of Council.*"

By Edward Kibler: That is all.

124 HAROLD FRANKLIN.

Cross-examination.

Examined by J. R. Fitzgibbon:

Q. Have you examined the minutes of the Council prior to the passage of the ordinance of March 6, 1911?

A. No, sir.

Q. You don't know whether any committee was appointed by the Council to examine into and investigate the condition of the natural gas fields in Ohio, do you?

A. No, sir.

Q. You don't know whether any committee was appointed to inform the Council as to the condition of the gas territory, so as to advise them as to what was a proper rate to be set forth in the ordinance?

A. No, sir, I don't know.

Q. The Council records, as far as you know, contain nothing of that nature.

By Eward Kibler: I object.

By Mr. Jones: He says he doesn't know.

Q. Will you kindly examine the Council proceedings for six months before March 6, 1911, to ascertain whether or not those records show the appointment of any committee or investigation made by the council before the passage of that ordinance?

A. Yes, sir.

Q. And let us know as soon as you can?

A. Yes, sir.

By Edward Kibler: I wish to offer in evidence the files of the Newark Daily Advocate for Mondays, Wednesdays and Fridays
125 for 18 times beginning and including March 10, 1911, as to the publication of the same notice in the same terms which

I have offered from the American Tribune. I have here the files, but Mr. Bowers is not here.

By J. R. Fitzgibbon: Well, that is al-right.

By Edward Kibler: I would like to have it admitted that the Newark Advocate is a paper of general circulation in this City and in this County.

By J. R. Fitzgibbon: Yes, sir, it is.

By Edward Kibler: Does Mr. Carl know the number of contracts that he had on the 6th of March, 1911?

By Mr. Carl: I cannot state that off-hand.

By J. R. Fitzgibbon: We will furnish that.

By Edward Kibler: Will you admit that it was as many as 3,500?

By Mr. Carl: Yes, sir.

By Edward Kibler: That is all. We rest.

By Mr. J. R. Fitzgibbon: If we could confer with council, it may be that we can eliminate considerable of the testimony.

126 The Court: Well, we will adjourn now until one o'clock.

(Here court adjourned until one o'clock p. m.)

HAROLD FRANKLIN (recalled).

Examined by J. R. Fitzgibbon:

Q. Mr. Franklin have you made an investigation of the records of the City Council in reference to ascertaining whether an inquiry was made by the Council before the passage of this ordinance.

A. Yes, sir.

Q. What did you find?

(Witness gets Journal of Council, Vol. 15.)

By Mr. Jones: I object. The answer sought to be elicited is not competent under the issues in this case. The evidence is not responsive to any issue raised in the pleadings, and it is entirely incompetent.

(After argument of the question by Counsel):

The Court: The Court will sustain the objection on the ground that it is immaterial. I will review the authorities this evening carefully, and if we find that we are wrong, I will notify counsel in the morning.

By J. R. Fitzgibbon: We except to the ruling of the Court and make our offer to prove.

By Edward Kibler: Make it out loud so that we can hear it.

127 By J. R. Fitzgibbon: This is the report of the Clerk as found in Journal 15, page 496, Council meeting, December 19, 1910: (He reads): (From Journal No. 15, Council Proceedings, Newark, Ohio, pages 496 and 497):

"NEWARK, OHIO, December 19th, 1910.

"To the Honorable Council, City of Newark, Ohio.

"GENTLEMEN: Upon the request of Mr. Oliver D. Irwin, I have written to several of the surrounding towns and cities in regard to

the natural gas situation and the following is a brief outline of the information received:

"Coshocton is paying for one thousand cubic feet of natural gas twenty-eight cents, with a discount allowed of ten per cent; they state that they do not know how long the present franchise lasts and that the supply of gas in their vicinity is not decreasing and that the price of natural gas should remain the same.

"Shelby, Ohio, is paying at the rate of thirty-three cents and one-third for one thousand cubic feet of natural gas with a discount allowed of ten per cent, and that their franchise will last until the next three years and that they will not grant a new franchise under the existing rates, also that the supply of gas in this vicinity is decreasing.

"Marion, Ohio, is paying for one thousand cubic feet of natural gas, thirty-three cents with a discount allowed of ten per cent; that their franchise expires in 1912, and that the gas in their vincinity is decreasing some but not to any great extent.

128 "Bremen, Ohio, is paying at the rate of thirty cents per one thousand cubic feet of gas, also that they think the price of gas will be increased.

"Marietta, Ohio, is paying at the rate of twenty cents per one thousand cubic feet for natural gas with a discount allowed of two cents and their franchise lasts for twelve years, and that the wells are playing out to some extent and that the gas companies are compelled to seek new wells.

"Ironton, Ohio, is paying at the rate of twenty-seven and one-half cents per one thousand cubic feet of natural gas with a discount allowed of two and one-half cents and the franchise does not expire until twelve years from this date.

"Utica, Ohio, is paying at the rate of fifteen cents per one thousand cubic feet of natural gas, also that the wells in the vicinity of Utica are decreasing in pressure on account of the pumping stations located near this village.

"Mansfield, Ohio, is paying at the rate of twenty-seven and one-half cents per one thousand cubic feet of gas, with a discount allowed of two and one-half cents, their franchise expires October, 1911, also stating that the price should not be increased as the supply is now nearer the City than when first piped there.

"Columbus, Ohio, is paying for one thousand cubic feet *feet* of natural gas, thirty-five cents with a discount allowed of five cents, and that the present franchise expires July, 1911, and that the Council has not considered the new rate yet.

"Junction City, Ohio, is now paying for one thousand cubic feet of natural gas twenty-five cents with a discount allowed
129 of twenty per cent and their franchise expires in ten years and that the supply of gas in their vicinity is increasing.

"Mt. Vernon, Ohio, is now paying twenty cents per one thousand cubic feet of natural gas with a discount allowed of two cents, and that no increase has been talked of other than the increase provided in the rate ordinance. The rate franchise provides for a rate of twenty cents (eighteen cents net) up to October, 1911, and twenty-

two cents (twenty cents net) from October 1, 1911, to October, 1913, another rate ordinance in favor of the Mt. Vernon Gas Light Company which has a complete outfit of mains, but which has not been furnishing gas for six years, was passed by this Council some few days ago. The provisions of this ordinance are as the one in favor of the Ohio Fuel Supply Company except that the twenty-two cents terminates one year later on October 1, 1914.

"Cambridge, Ohio, is now paying thirty cents per thousand cubic feet for gas with a discount allowed of five cents, and their franchises expires October, 1918, and the supply of natural gas is decreasing in their vicinity.

"Delaware, Ohio, is now paying at the rate of thirty cents per thousand cubic feet of natural gas with a discount allowed of ten per cent and their gas is being delivered to them from West Virginia and that no increase is talked of.

"I have compiled the various prices paid by the cities and towns named in this communication and find that the general average of the price of natural gas per one thousand cubic feet paid by these thirteen cities with a discount off is twenty-four and
130 one-thirteenth cents per one thousand cubic feet, and figuring the price without deducting the discount amounts to twenty-seven and three thirteenths cents per one thousand cubic feet."

"Respectfully submitted,

JAMES McCARTHY,
*"Clerk of Council.*

"On motion of Elsner, seconded by Stare, the report was referred to the committee on law."

By Edward Kibler: We object to that.

The Court: The objection is sustained.

By Mr. Fitzgibbon: We wish an exception.

The Court: Council was simply reading that as the answer of the witness?

By Mr. Fitzgibbon: As the answer of the witness, yes, sir. At this point, we ought to let the record show that we called various members of the City Council and offered to prove by them that prior to the passage of the ordinance of March, 1911—that no committees were appointed to investigate the supply of natural gas in this vicinity, and no inquiry was made by the Council to determine what was a proper and reasonable rate before the passage of the ordinance; and also that representatives of the gas company appeared before the Council and requested them to appoint a committee to look into the gas situation and offered them all the
131 information that they had upon the subject, but that no such committee was appointed.

By Mr. Roderic Jones: We do not care to have that go in.

By J. R. Fitzgibbon: All right, I will call John Prior.

(Mr. Prior was called but was not present.)

(A separation of the witnesses was asked by counsel for plaintiff and was ordered by the Court.)

HERMAN ELSNER, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. C. W. Montgomery:

Q. You are a resident of this City?
A. Yes, sir.
Q. And you were formerly a member of the City Council?
A. Yes, sir.
Q. During what time were you a member?
A. From January 1, 1910, to January 1, 1912.
Q. You were a member of the Council when this ordinance was passed which is now in controversy here?
A. Yes, sir.
Q. I will ask you to state whether or not prior to the passage of that ordinance you, as a member of the City Council of the City of Newark, made any investigation——
A. Yes, sir.

By Edward Kibler: Don't answer until we have a chance to object. That is objected to.

132 The Court: The objection is sustained.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is sustained.

Q. (Concluded:) Whether or not prior to the passage of that ordinance you, as a member of the Council, made any investigation of the cost of the production of natural gas in this vicinity, or of the elements which would go into the cost of natural gas, or the elements which would enter into a determination of a rate ordinance for gas in the City of Newark.

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception, and I offer to prove that he made no such investigation except such as was made by the Clerk in behalf of the Council, as is shown in evidence. And I wish an exception.

Q. Do you know Mr. K. C. Krick?
A. Yes, sir.
Q. Did you know him before the passage of the ordinance?
A. I met him about three times before we passed the ordinance.
Q. While it was under discussion?
A. Yes, sir.
Q. I will ask you whether or not you had any talk with Mr. Krick?

By Mr. Jones: I object.

133 Q. You knew that Mr. Krick was an agent of the Newark Natural Gas and Fuel Company, did you?
A. Well, I heard that he was an agent of the Logan Company.

Q. Who appeared before the Council asking for the granting of a franchise to the Newark Natural Gas and Fuel Company?

By Edward Kibler: I object.

Q. Who appeared on behalf of the Newark Natural Gas and Fuel Company asking for the granting of a franchise?

By Edward Kibler: I object.
The Court: The objection is overruled.
By Edward Kibler: Note an exception.

A. Mr. Krick, Mr. Louis Carl and James Fitzgibbon.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

Q. I will ask you whether or not, prior to the passage of the ordinance, you had any talk with Mr. Krick about what investigation he desired you to make before the passage of the ordinance.

By Edward Kibler: I object.
134 The Court: The objection is sustained.
By Mr. Montgomery: Note an exception. And I offer to prove that he did. And I wish an exception.

Q. I will ask you what that conversation was and what requests Mr. Krick made of you and what investigation, if any, Mr. Krick asked you, as a member of the council, to make, before the passage of the ordinance?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception. And I offer to prove that, prior to the passage of the ordinance, in this talk with Krick, Krick told Mr. Elsner and the other members of the Council that before they passed the ordinance he desired that they should make a thorough investigation of all mattters affecting the gas field, the cost of gas and so forth, in order that they might determine what would be a proper rate for the City of Newark under all these facts and circumstances; and that the request of Mr. Krick was made to Mr. Elsner and the other members of the Council. And we also offer to prove that Mr. Krick, in open Council, in the presence of all the members of the Council, asked them to appoint a committee to investigate these facts before passing the ordinance. And I wish an exception.

Q. I will ask you to state whether or not, after the request
135 was made by Mr. Krick, or after this conversation, that you had with Mr. Krick, you, or the other members of the Council, so far as you know, did anything to comply with that request.

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note exceptions. And we offer to prove

that this witness will say that they did not. And we wish an exception. That is all.

By Edward Kibler: That is all.

(There was no cross examination.

ELMER ORR, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Chas. W. Montgomery:

Q. Your name is Elmer Orr?

A. Yes, sir, it is.

Q. In March, 1911, what, if any, official position did you hold in the City of Newark?

A. Councilman from the 3rd Ward.

Q. Were you President of the Council, pro tem., or something?

A. I think so, yes, sir.

Q. You were a member of the Council at the time of the passage of this gas ordinance?

A. Yes, sir.

136 Q. How long before that were you a member, or during what years were you a member of the Council?

A. From 1908 to 1912.

Q. For four years?

A. Yes, sir.

Q. Did you know Mr. K. C. Krick at that time?

A. Yes, sir, I did.

Q. I will ask you whether you, as a member of the Council, had any conversation with Mr. Krick in reference to the passage of this gas ordinance before it was passed.

By Edward Kibler: I object.

The Court: He may answer.

A. I had some conversation with him.

Q. What was said by Mr. Krick to yourself or the other members of the Council in your presence in reference to the passage of this ordinance?

By Edward Kibler: I object.

The Court: The objection is sustained.

By Mr. Montgomery: I wish an exception, and I offer to prove that Mr. Krick said to Mr. Orr, and other members of the Council, in his presence, that before the gas ordinance should be passed, that he desired that they make a full investigation of all matters pertaining to the gas field which would enter into a proper determination of the rate and we wish an exception.

137 Q. I will ask you whether or not Mr. Krick appeared in open Council and made a request in reference to the investigation of the facts before the passage of the ordinance.

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception, and we offer to prove that he did and an exception.

Q. I will ask you whether or not, after the appearance of Mr. Krick before the City Council, and the talks of Mr. Krick with yourself and other members of the Council, in your presence, any investigation was made by you in reference to the gas field, or the different things which should be considered by you prior to the passage of the rate ordinance.

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception. And we offer to prove that none was made, except such as was made by the Clerk, which has been read. And an exception. That is all.
By Edward Kibler: That is all.
(There was no cross examination.)

138 PHIL. VOGELMEIER, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Chas. W. Montgomery:

Q. Your name is Phil Vogelmeier?
A. Yes, sir, it is.
Q. Were you a member of the City Council in March, 1911?
A. Yes, sir.
Q. At the time of the passage of the gas ordinance?
A. Yes, sir.
Q. Did you know at that time Mr. K. C. Krick?
A. Yes, sir, I met him.
Q. He appeared before the City Council, did he?
A. Yes, sir, he did.
Q. Were you present on one occasion when he appeared before the Council and made a request in open Council?

By Edward Kibler: I object.
The Court: The objection is over-uled.
By Edward Kibler: Note an exception.

A. Well, I don't know. I was there several times when he was there. I cannot just recall.
Q. Do you remember whether or not he made any addresses before the Council?
A. Yes, sir.
Q. In reference to the gas ordinance?
A. Yes, sir.
Q. I will ask you whether or not you had any talk with him, or heard him talk to any other members of the Council,
139 other than in open meeting, in reference to the passage of the gas ordinance or what, if anything, he desired you to do in the way of an investigation before the passage of the ordinance.

A. I don't recall it. I talked to him several times myself after the Council meetings.

Q. About that?

A. No, sir, not about that.

Q. Well, did you hear any talk by him except in open Council as to what he desired about the gas ordinance?

A. I think not.

Q. I will ask you to state what was said by Mr. Krick in open Council about the passage of the gas ordinance and what, if anything, he desired you to do in the way of making investigations befor the passage of the ordinance.

By Edward Kibler: I object.

The Court: The objection is sustained.

By Mr. Montgomery: I wish an exception and I offer to prove that Mr. Krick, in open Council, requested the members of the Council that they should, before the passage of this, or any other rate ordinance, make a thorough investigation of the condition of the gas field, cost of production and all facts which would enable them to intelligently determine what a proper rate should be and we wish an exception.

Q. I will ask you to state whether or not, after the appearance of Mr. Krick before the Council, to which you have testified, and before the passage of the ordinance, you did anything to comply with the request which Mr. Krick made.

By Edward Kibler: I object.

140 The Court: The objection is sustained.

By Mr. Montgomery: Note an exception and we offer to prove that he did not. That is all.

By Edward Kibler: No questions.

(There was no cross examination.)

Mr. MUENTZ, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Chas. W. Montgomery:

Q. Mr. Muenz, you a member of the City Council?

A. Yes, sir.

Q. And you were in March, 1911?

A. Yes, sir I was.

Q. Who were members of the City Council in March 1911?

A. Elmer Orr, Mr. Stare was president, pro tem.; Mr. Irwin; Mr. Vogelmeier, Elsner and myself.

Q. Mr. Baker?

A. Yes, sir.

Q. He is dead?

A. He is dead, yes, sir.

Q. And John Pryor?

A. Yes, sir.

Q. Did you know K. C. Krick at that time?
A. Yes, sir.
Q. Were you present at the time when Mr. Krick appeared and addressed the Council and made certain requests in reference to a proposed gas ordinance?
A. Yes, sir, I was there.
141 Q. Did you have any talk with him about this gas ordinance?
A. Yes, sir.
Q. Outside, other than in Council meeting?
A. Yes, sir.
Q. I will ask you whether or not, either in open Council, or in private talks with you, Mr. Krick made any request as to what, if anything, he desired you or the other members of Council to do in the way of making an investigation as to the condition of the gas fields, and other things, prior to the passage of the gas ordinance?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception. And we offer to prove that he did and we wish an exception.

Q. Mr. Muenz, what was said by Mr. Krick on the occasion to which you have referred when he appeared before the City Council in reference to the rate ordinance?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception and we offer to prove that Mr. Krick asked the members of Council that they should, before the passage of any rate ordinance, make themselves thoroughly acquainted with all facts and the cost of production and all
142 the information which they could supply; and Mr. Krick offered to give them all the information that the company had about the cost of production, and exceptions.

Q. I will ask you what, if anything, was said by Mr. Krick in talking to you personally?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: We wish an exception and we offer to prove that Mr. Krick made the same request to the witness, personally, and we wish an exception.

Q. What, if anything, was done by you in reference to complying with his request of Mr. Krick before the passage of the ordinance?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception and we offer to prove that he will say: Nothing. And we wish an exception.
That is all.
By Edward Kilber: That is all.
(There was no cross examination.)

143 OLIVER IRWIN, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Chas. W. Montgomery:

Q. Were you a member of the City Council in March, 1911?
A. Yes, sir.
Q. And you had been for how long before that time?
A. Three years.
Q. Did you at that time know Mr. K. C. Krick—the gentleman who was here this morning—the gas man?
A. I don't remember his name. I saw a gentleman in the witness room. I was just talking with him, but I don't know his name.
Q. With dark hair?
A. Yes, sir, and smooth face.
Q. The man who appeared before the Council in reference to the ordinance?
A. Yes, sir.
Q. Were you present when he appeared before that body in that connection?
A. Yes, sir.
Q. How many occasions did he address the Council in reference to this ordinance?
—. I couldn't tell that. He was there several times.
Q. On the occasions that you remember, I will ask you what he said in that connection?

By Mr. Kibler: I object.
The Court: The objection is sustained.
144 By Mr. Montgomery: Note an exception. And we offer to prove that Mr. Krick said on that occasion—that he asked the members of the Council that they should, before the passage of any rate ordinance, make themselves familiar with the gas field and the cost of production and all other information which could be had, and that the company would furnish them with all the information that they had in this connection. And we wish an exception.

Q. I will ask you if you made any effort to comply with the request which Mr. Krick made in reference to an investigation of this matter?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception and we offer to prove that this witness will say that he made none, and exceptions.
That is all.
By Edward Kibler: That is all.
(There was no cross examination.)

JOHN A. PRYOR, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Chas. W. Montgomery:

Q. Your name is John A. Pryor?
A. Yes, sir, it is.
145 Q. Are you a member of the City Council of this City?
A. Yes, sir, I am.
Q. You have been for how long, Mr. Pryor?
A. This is my second term.
Q. You were a member in March, 1911, were you?
A. Yes, sir.
Q. When this gas rate ordinance was passed?
A. Yes, sir.
Q. Did you know Mr. K. C. Krick at that time?
A. I don't know him. There was some man there.
Q. Well, the man who appeared in reference to the gas ordinance?
A. There was some man there with Mr. Fitzgibbon. I don't know whether that is his name or not.
Q. I will ask you whether or not he made an address to the City Council in reference to the gas ordinance?
A. I believe he did. As far as I can remember.
Q. Well, what is the fact?
A. I think he did.
Q. I will ask you to state what he said on that occasion?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception. And we offer to prove that the witness will say that Krick on that occasion asked the members of Council to make a thorough investigation of the cost of production of gas and the condition of the field and every other matter and kind before the passage of any rate ordinance and of-
146 fered to give them the information that he had. And we wish an exception.

Q. I will ask you if you had any personal talk with Mr. Krick before the passage of the ordinance?
A. No, sir.
Q. I will ask you, whether, after Mr. Krick appeared and addressed the Council, you made any effort to comply with any request that he made on that occasion?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception and we offer to prove that he did not and we wish an exception. That is all.
(There was no cross examination.)

K. C. KRICK, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Chas. W. Montgomery:

Q. Your name is K. C. Krick?

A. Yes, sir, it is.

Q. Were you in the City of Newark in the winter and spring of 1911, at the time of the passage of this gas ordinance, while that matter was being discussed?

A. Yes, sir.

Q. I will ask you whether or not you appeared before the City Council of the City of Newark in reference to this gas ordinance?

A. Yes, sir.

Q. What did you do?

147 By Edward Kibler: I object.

The Court: I will sustain the objection.

By Mr. Montgomery: I wish an exception.

Q. How many times did you appear before that body?

A. I would say approximately, seven or eight times.

Q. During how long a period?

A. Beginning about the 1st of September, 1910, and the last time, I believe, was in February, 1911.

Q. I will ask you whether or not you addressed the City Council in reference to the rate ordinance?

A. Yes, sir. On various occasions. On all occasions when I was present.

Q. I will ask you what, if anything, you asked them to do on those occasions?

By Mr. Kibler: I object.

The Court: The objection is sustained.

By Mr. Montgomery: Note an exception and we offer to prove that the witness, on all these occasions, when he appeared before the City Council, asked the members to make a thorough investigation of the cost of the production of gas; the condition of the gas fields, and to inform themselves thoroughly upon all facts which would assist them in forming an impression of a proper rate ordinance, and we wish an exception.

148 Q. I will ask you whether or not you had any personal talks with members of the council other than in open council?

A. Yes, sir.

Q. With how many?

A. I would say with each and every member.

Q. On how many occasions?

A. It is difficult to state that.

Q. On more than one occasion?

A. Yes, sir.

Q. I will ask you to state what you said to the different members of Council on these occasions?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: I wish an exception. And we offer to prove that he made the same request to the members personally that he made in open Council. And we wish an exception.

Q. Do you know whether or not the Council took any steps towards complying with the request that you made of the members of Council?

By Edward Kibler: I object.
The Court: He may answer.

Q. Do you know?
A. I do.
Q. Did they or not take any steps to comply with your request?

By Edward Kibler: I object.
149 The Court: The objection is sustained.
By Mr. Montgomery: We wish an exception and we offer to prove that they did not. That is all.
By Edward Kibler: That is all.

SAMUEL S. WYER, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

Q. State your name?
A. My name is Samuel S. Wyer.
Q. Where do you reside, Mr. Wyer?
A. I reside in Columbus, Ohio.
Q. How long have you lived at Columbus, Ohio?
A. For thirteen years.
Q. State whether or not you have any special technical education along the line of public utilities?
A. Yes, sir, I have made a special study for the last six years in connection with engineering work.
Q. State what societies you belong to and what books you have written and so on, if any?
A. I am a member of the American Society of Mechanical Engineers; the American Institute of Mining Engineers; the American Academy of Political and Social Science and the Sigma Xi.

By Edward Kibler: That is a college fraternity, is it?
A. A scientific honorary membership.
150 Q. What books have you written?
A. Joint author with Professor L. S. Marks, a text book on oil engines and gas producers; sole authorship. Treatise on Producer Gas, and Gas Producers, and Catechism on Producer Gas, Water Regulation of Electric Power, Regulation, Valuation and Depreciation of Public Utilities.

Q. Which is the later work?

A. The latter.

Q. Have you made any examination of natural gas fields recently?

A. About two years ago, I made an examination, jointly with Prof. Hitchcick of the Ohio State University, of all the property of the Columbus Gas and Fuel Company. I recently made a detailed investigation of all the property of the Kansas Natural Gas Company in Kansas and Oklahoma for the United States District Court of Kansas.

Q. Under what authority?

A. Under the court's direction and for the court.

Q. What was involved, chiefly?

A. A complete valuation of the Kansas Gas Company, and working out complete schedule of rates, based upon the cost and worth of the service; the court's order was very specific that both the cost and worth would have to be considered in working out the schedule of rates.

Q. This investigation that you made for the Columbus Gas and Fuel Company was in what territory?

A. North of Newark, and around Sugar Grove.

Q. Immediately north of Newark?

A. Yes, sir. This entire territory, known as the Homer-Utica field.

Q. At whose instance was that done?

A. The City of Columbus.

151 Q. When was that?

A. About two years ago.

Q. What was the purpose of the investigation requested by the City of Columbus?

By Edward Kibler: I object.

Q. What did it involve?

A. An examination of all the property; not only of the compressor stations and transmission lines, but a careful investigation of the condition of the wells in the field.

Q. State to the Court, fully, what, at that time, you found in that field. What conditions you found. As to the rock pressure, first?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. I found that the rock pressure was decreasing very rapidly.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. What did you find in your investigation over the field at that time, if you recall, as to what the rock pressure was?

A. I will have to refer to my notes to verify that.

152 Q. Well, you may refer to your notes.

By Edward Kibler: We do not want to object to every question, but we want the record to show an objection to each of the questions, and a motion to rule out the answers, and exceptions.

The Court: If the objection is as to the form of the question, you will call the Court's attention to it?

By Edward Kibler: Yes, sir.

The Witness: The average rock pressure at that time was slightly under 300 pounds per square inch.

Q. Do you know, of your own knowledge, what the rock pressure in that field was when it was at its best?

A. 750 pounds per square inch.

By Edward Kibler: I move to rule that out. He asked whether he knew.

The Court: It may go out.

Q. Well, do you know?

A. Yes, sir.

Q. What was it?

A. 750 pounds.

Q. Have you made any investigation since the time you speak of—about two years ago—in that field?

A. No, sir, not in the way of gauging wells in that particular field. I have examined, however, the well records which have come in from the men in the field.

Q. State, in your own way, from your experience, what the difference in the rock pressure indicates.

Objected to.

153 A. As the rock pressure decreases, the cost of production increases.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is sustained. Read the question.

(The Stenographer read the question.)

A. A depletion of the field.

Q. Can you give the Court the extent of that, as to all the ways in which the supply of gas is affected by it?

A. The carrying capacity of the gathering lines would be less than one-half of the original capacity at the present time. That is, when the rock pressure was 750 pounds, it would be double what it is today, when the rock pressure measurement is under 200 pounds.

Q. Where you have a diminution of rock pressure in the field, which you speak of, as you know it, what is the effect on the individual wells, as to the amount that they produce?

A. It decreases the capacity very materially.

Q. What would be the result on the wells as to the cost of keeping them in condition to deliver gas?

A. The cost of operating the wells increases, due to the fact that you have more trouble to take care of, in keeping the wells free, so that they will deliver the smaller amount of gas into the line.

Q. As you knew that field two years ago, or when you made your investigations, what would be the result of development in that field, as to drilling wells, and all that sort of thing—taking into account the rock pressure as it affects the cost of production?

154 By Edward Kibler: I object.

By Judge Douglass: I will eliminate "all that sort of thing" from the question.

The Court: Read the question.

(The Stenographer read the question with the words "all that sort of thing" eliminated.)

By Edward Kibler: I want to still object to that question, as not being intelligible.

The Court: The objection is overruled.

A. The cost increases.

Q. Does it increase materially, or otherwise?

A. The cost today would be perhaps double, taking a fair average of the new wells that have come in—double what it would have been originally when the high rock conditions prevailed.

Q. What factors are to be considered in determining an adequate and proper natural gas schedule?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. First, consider the economic features; second, take care of all the fixed charges; third, take care of all the running, or
155 variable charges; the schedule should be worked out so that it bears a close relation to the cost of rendering the service.

Q. Has the value of the service anything to do with its cost?

A. Yes, sir, very materially.

Q. In what way?

A. One of the factors recognized by the United States District Court——

By Edward Kibler: I object.

The Court: Read the question.

(The Stenographer read the question.)

Q. Give your own knowledge?

A. The worth of the service would have to be considered in fixing the rate. That is, the worth of the service to the consumer; what he would have to pay for competitive means to render him the same service.

Q. State the meaning of "cost price"?

A. It involves several elements. First, the actual expenses of production. Second, at all times to keep the investment intact; and a rate of return upon that investment which will involve two elements: First, the legal interest rate on the money invested; and, second, a rate of profit over the legal interest rate, and which profit ought to be commensurate with the hazard of the enterprise.

By Edward Kibler: I move to rule out the latter part of the answer, as to what it ought to be.

The Court: That may go out.

156 Q. As between the cost price and the worth,—what relation do they bear?

A. The worth is what the consumer would have to pay in order to get a competing service. That is, to render the same service to him. The cost is simply the cost based upon the economic conditions that are outlined in answer to the preceding question.

Q. On this question of the rate, state to the Court in what particulars rate-making in natural gas differs from artificial gas?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. It differs in a very material manner, for the reason that, as to artificial gas, you have a fixed basis upon which to make your product; you can buy your solid fuel from different sources, and make your gas at a fixed plant, and have no hazard in securing the fuel. With natural gas, you have to depend entirely upon nature's mercy. The entire plant is dependent upon the supply of gas under the ground, and which is always uncertain and is constantly decreasing. The hazard is very much greater than the hazard in the artificial gas business.

Q. What other elements of hazard enter into the conduct of the natural gas business?

A. The company has absolutely no control over the quality or the quantity of the supply; and in a field developed as all gas fields are under present commercial conditions—where a large number

157 of companies are operating in the same field, each company is, to a large extent, working against the interests of the other company. For instance, the Ohio Fuel Supply Company is taking gas from the same field that the Logan Company is, if the Logan Company were to stop for a year and not take that gas—that is, if they were to try and store it, it would be a physical impossibility for them to do it, due to the fact that the other wells would deplete the quantity and they are absolutely unable to in any way conserve the supply for future use; and the more companies there are which operate in a given field, the shorter will be the life of the pool, and the greater will be the hazard of the enterprise.

Q. What is the purpose of compressor stations?

A. They are to prepare the gas for transportation; for the same reason that a farmer compresses hay or straw; to get it into a compact volume, and transport the gas through pipes which can be built under the present commercial conditions. If you do not have them to decrease the volume, the size of the pipe line that you have to have to bring gas from West Virginia to Ohio—the cost of the pipe would be so high that it would make the enterprise absolutely prohibitive.

Q. In the transmission of natural gas, state whether or not there is a large loss by leakage?

A. Yes, sir. Very large; not only in the lines in the field, in the compressor stations, and in the trunk lines, but also in the distributing system in the towns.

Q. Should the leakage be considered in determining the cost of natural gas?

158 A. It must always be considered for the reason that the company selling the gas must stand the shortage in volume between the wells and the meters on the consumers' premises.

Q. What do you know, from your knowledge, as to the cost of the acreage carried?

A. I couldn't answer that from personal investigation in this particular field within the last year.

Q. Is that one of the risks?

A. It is a large element.

Q. Why is that so?

A. In order to keep a supply for future use, it is necessary for any gas company to carry a large acreage in reserve, which must be tested out, but which has the earmarks of producing gas. On account of the peculiar conditions prevailing in the operation of the plant, it is not possible to test that acreage out when is is acquired, and it must be carried, and the lease rentals paid, until such time as the company needs that additional amount of gas which the acreage is supposed to contain.

Q. Have you any knowledge as to the per cent of all leased territory that is surrendered as wholly unproductive?

By Edward Kibler: I object.

The Court: If he can answer it, he may answer.

A. I cannot answer that question.

Q. You cannot answer that question?

A. No, sir.

The Court: We will have a short intermission now.

(Here the court took a recess.)

(After the recess:)

159 SAMUEL S. WYER.

By Judge S. M. Douglass:

Q. Mr. Wyer, what is the relative worth of natural gas as compared with other fuel?

A. In round numbers, the heating value and worth for all purposes, either industrial or commercial, natural gas is worth fifty per cent more than artificial.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Have you any chart or anything that you can show that feature of this examination with?

A. I have a large chart which shows the relative worth of natural gas and all the other well known heating substances.

Q. On the question of depletion—have you worked out a chart showing the actual depletion as it occurred?

A. Yes, sir, for each year.

Q. I wish you would exhibit it.

(The witness gets chart.)

A. The distances from the bottom to the top represent the rock pressure in pounds per square inch. Each one of the distances represent fifty pounds. 800 at this point (indicating on chart). The horizontal spaces represent the years from 1895 to 1911. In the Sugar Grove field, the pressure was 800 pounds. The small figures represent the number of well-records, in order to
160 determine the particular point on the curve. For instance, at this point (indicating on chart) 75 individual well-records were averaged in order to determine that average point. This field—the Sugar Grove—dropped down until in 1904 when it begins to go out in a horizontal direction; and at the end of 1911, it was just a little over 100 pounds. The Homer field started in at 750 pounds, and has dropped at just about the same rate as the Sugar Grove field; and in 1911, the pressure was just a little bit under 200 pounds per square inch. The small diagram here (indicating) represent the territory embraced, which is plotted.

Q. In 1895, what was the rock pressure of the Sugar Grove field?

A. 800 pounds.

Q. What was it in 1904?

A. About 152 pounds.

Q. From 1904 to 1911, in the Sugar Grove field, the horizontal line represents the pressure?

A. Yes, sir. About 120 pounds.

Q. Do you know how much, measured in cubic feet, is the production from the Sugar Grove field now?

A. I couldn't testify as to that exact value.

Q. Taking the Sugar Grove field from 1904 to 1911, relatively, what would be the cost of production in that field, as compared with the years from 1895 to 1904?

By Edward Kibler: I object.

Q. What is the cost of production as the rock pressure decreases?

By Edward Kibler: I object.

The Court: The objection is overruled.

161 By Edward Kibler: Note an exception.

A. The capacity of the wells was very materially reduced. Each well, however, has its own peculiar characteristics. No general statement could be made that would apply *the* all wells other than that the capacity would be materially below the normal capacity.

What the exact ratio would be, depends upon the individual characteristics of each well. The cost of taking care of the wells is greater when the pressure has dropped to about 150 than what it would be if the pressure had remained at the original pressure of 800.

Q. Why is that?

A. One of the main difficulties is in taking care of the salt water which is more troublesome when the pressure is low. Another factor is that when your rock pressure drops, there are a large number of wells that cannot be handled at all except by compressor stations. The pressure is low, and it cannot be forced out of the well into the line; and it is necessary to have them hooked directly on to compressor stations.

Q. What is the rock pressure of the Homer field?

A. When this data was compiled, which was at the end of 1911, the average——

By Edward Kibler (interrupting): I object.

The Court: Read the question.

(The Stenographer read the question.)

Q. At the end of 1911.

By Edward Kibler: I object.

162 The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. The pressure was just a little bit under 200 pounds.

Q. Have you any knowledge of the rock pressure now over the field, in the last two years?

A. I have examined the official records that have come in, but I did not gauge the wells.

Q. You examined the official records, did you?

A. Yes, sir.

Q. What do you find that they show?

By Edward Kibler: I object.

Q. How are they made up? From what sources?

A. From the individual records that are kept of each well.

Q. Who does that?

A. The company keeps the records for its own information.

Q. What companies have you had access to on that subject?

A. The Ohio Fuel Supply Company, The Logan Gas Company and the Columbus Gas and Fuel Company.

Q. And, from those records, what do you find?

By Edward Kibler: I object.

The Court: Has he examined the different reports?

Q. Have you made an examination of the different reports of the three companies that you have named?

A. Yes, sir.

163 Q. Are you testifying now from what you found?

A. From what the general tendency on the records indicate.

By Edward Kibler: I object.
The Witness: The reports indicate within the range——

By Edward Kibler (interrupting): I object.
The Court: Proceed.
By Edward Kibler: Note an exception.

A. The reports indicate that the Homer field is going to take exactly the same shape as the curve of the Sugar Grove field. In 1912, the curve begins to flatten out, and go out in a horizontal direction; and the rock pressure is materially below what it was at the end of 1911.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.
By Judge Douglass: We will offer in evidence this chart.
By Edward Kibler: We object to it.

Q. Who drew it?
A. One of my draftsmen did the manual work. I got the data together.

164 The Court: It may be admitted.
By Edward Kibler: We wish an exception.
(Said chart was here marked by the Stenographer Exhibit A.)
(A true copy of said chart, so marked, is hereto attached, made part hereof.)
By Edward Kibler: We move to strike it from the record.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

Q. Have you a chart showing the drilling over the field which we have been discussing?
A. Yes, sir. (Witness gets chart.)
Q. What does that represent?
A. This map shows the territory south of Newark, and to the north and west; showing the Homer-Utica field, and the Licking field.
Q. State whether or not Newark is supplied from the Homer field.
A. Well, a large portion of the gas coming to Newark comes from West Virginia, but a part of it from the local field.
Q. Is any portion of it coming from West Virginia?
A. Yes, sir, a large portion is now coming from West Virginia.
Q. What other companies are operating in this field?
A. We have indicated the three companies—the Ohio Fuel Supply Company, The Columbus Natural Gas and Fuel
165 Company and the Logan Company. A number of other companies have wells in this field, but they are not shown. None of the local gas companies around Utica are shown.
Q. Coming to the question of the operation of these three companies in the same field, each separate from the other—what follows from the necessities which arise in such case?

By Edward Kibler: I object.
The Court: The objection is overruled.
By Edward Kibler: Note an exception.

Q. And state why that is true and how.
A. The effect is simply this: If the Logan Company should decide that they would conserve their territory and stop drawing from this territory for two years, the other two companies operating simultaneously, would be getting the gas that the Logan Company would get if it were operating its plant during the same time. For that reason, it is a physical impossibility, when competition exists, for one company to conserve its supply and hold it for future use, as long as other companies draw gas from the same pool.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

166 Q. What does this represent? (Indicating chart.)
A. The Sugar Grove field.
Q. State whether or not several companies operate in that field.
A. Not only these three companies, but several other good sized companies, and a number of small companies are drawing from there.
Q. What results from that?
A. Rapid depletion of the gas.
Q. Is there anything else that you have on that plat?
A. Nothing else that would be relevant.
Q. Have you seen that chart? (Hands chart to the witness.)
A. Yes, sir.
Q. What does that represent?

By Edward Kibler: I object.

Q. Does that represent the lines of the different companies?

By Edward Kibler: I object.

The Court: He may explain the chart. The charts ought to be marked.
By Judge Douglass: You may mark those in alphabetical order.
(The charts above indicated were marked, by the Stenographer, for identification, B, C and D.)
By Judge Douglass: This is the fourth chart or plat that we have had.

The Witness: Exhibit B is simply a map of the State of
167 Ohio, and has marked thereon the location of all the main trunk lines of the different companies transmitting and distributing gas in the State of Ohio.

By Edward Kibler: I move to rule that out. There is no showing that it is correct, or that it has been drawn by anybody that has any knowledge on the subject at all.
The Court: It is not offered yet.
By Edward Kibler: Well, I move to rule out that answer.
The Court: The answer may go out.

Q. Who prepared this chart?

A. It was prepared in the office of the Logan Natural Gas and Fuel Company by one of their draftsmen, under my directions.

Q. Is that map correct?

A. It is. A similar map was sent to each one of the operating companies so that their engineering department could verify the information that we had placed thereon.

By Edward Kibler: I move to rule that out—that a similar map was sent to the other companies.

The Court: That may go out.

Q. Apart from showing these trunk lines, what other thing does it represent?

A. A large number of towns and their location in the State of Ohio, which are now using gas, and getting their supply of gas from the same place that Newark is getting its supply. In
168 other words, to emphasize the fact that Newark had no privileges but was simply one of the large number of towns in Ohio which were getting their gas from a series of common trunk lines, and common gas fields in the State of Ohio, and which cross the Ohio River into the West Virginia fields.

Q. How many of the towns are supplied as Newark is?

A. Practically all of them are supplied on the same basis as Newark is. There are very few towns which have a purely local supply. That is, where the gas comes from wells in the immediate vicinity.

Q. Well, approximate the number.

A. I couldn't do that. I haven't the figures here. But I know that there are several hundred towns in the State of Ohio which use natural gas.

Q. Is there any other matter on the map besides what you have indicated?

A. It indicates the large investment necessary, as far as the transmission lines are concerned, in order to make possible the use of the gas in the towns, and to connect them with existing gas supply many miles away.

Q. Is there anything to indicate the mileage of the trunk lines?

A. No, sir, there is no data on this map which would indicate that.

Q. Is the load of the natural gas uniform?

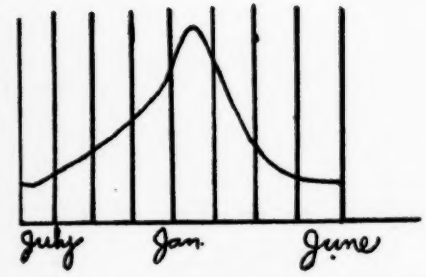
A. It is not. It varies largely in the different hours of the day and different seasons.

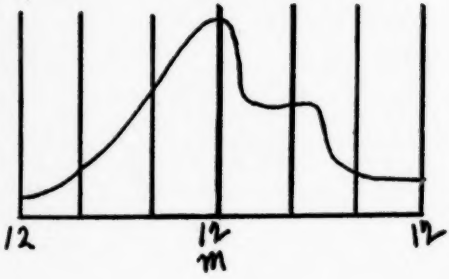
Q. When is it the largest and when is it the smallest?

A. I can best illustrate that by making a diagram on the blackboard. (Witness makes diagram on blackboard.)

(A true copy of which said diagram is as follows):

(Here follows diagram marked page 169.)




No 615
Newark Natural Gas
& Co v
City of Newark

Ex 169

170 A. The mean average load for the year would not be over 50% of the capacity that you have to have to take care of the short and high peak which occurs during the winter months. Different towns have slightly different characteristics, but in general the load will drop down in the morning and come up at noon, and drop down again towards evening. The equipment that you must have in order to render adequate service is very much larger than the mean average load on the plant during the day.

Q. Does that add to the cost of production?

By Edward Kibler: I object. It is leading.

Q. State whether or not it does.

A. Yes, sir, it adds very materially to the cost, due to the fact that the average natural gas company will have a large amount of equipment that is used not over one per cent of the time during the year. The equipment that must be kept ahead to take care of the abnormal peaks. They will not be used more than about one per cent of the total time.

Q. These fields about which you have spoken—the Sugar Grove and Homer field, which have so rapidly depleted—what is the fact as to their regeneration?

A. There is none, as far as we know of, at the present time.

Q. What is the experience everywhere, to which your knowledge extends, as to the depleted fields in Indiana and Western Ohio, as to their restoration?

A. As soon as the pools have become depleted, there is no regeneration, and the pools are, therefore, worthless, and the supply becomes exhausted, as far as commercial work is concerned.

171 Q. Where is the largest natural gas area in Ohio?

A. The so-called Ashland field.

Q. What is the draft or pull that is made on that field, as compared with the time when the Sugar Grove and Homer fields were discovered?

A. It is today very much larger than the draft on the Sugar Grove or Homer fields were at the same period of development.

Q. What will be the effect of that?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. The rate of depletion will be faster than in the other two fields.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Explain what the difference is between the open flow capacity of a well and what can be actually gotten into the line.

By Edward Kibler: I object.

The Court: The objection is overruled.

172 By Edward Kibler: Note an exception.

A. The open flow capacity is the capacity determined when the

gas well is discharging freely into the atmosphere against no delivery head other than the atmospheric pressure. The capacity that you can get out of that well under operating conditions is much smaller, due to the fact that, in order to get gas into the line, you must have considerable pressure; and the well, instead of flowing freely into the atmosphere, is flowing against a certain head, which restricts the flow very materially. As a result, the actual working capacity of the well, under routine operating conditions, is materially less than the open flow capacity.

Q. State, if you know, what percentage of the open flow capacity of the well can be finally delivered to the consumer.

A. I have no record of this field to answer that question.

Q. Have you records elsewhere?

A. Yes, sir, based upon actual tests made under my own personal direction.

Q. What was it?

By Edward Kibler: I object.

Q. Where was that?

A. In Kansas and Oklahoma. The same general characteristics prevail there.

Q. If the same general characteristics prevail——

By Edward Kibler: (interrupting): I object. I don't think he is qualified.

Q. Did you examine those fields?

A. Yes, sir.

Q. And you have examined this field?

A. Yes, sir. But I didn't make any tests to determine that
173 ratio in this field.

Q. What about the conditions? Were they similar, or not?

A. To a large extent, the two fields have the same general characteristics.

Q. What percentage of the gas was delivered to the consumer?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. The tests that we made there indicated that about 15% of the open flow capacity was delivered to the gathering lines.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Who was associated with you, if anybody, in your investigation of the Homer field, when you were acting for the City of Columbus?

A. Prof. E. A. Hitchcock.

Q. Who is he?

A. He is professor of experimental engineering at the Ohio State University.

Q. Did you make a joint report to the City of Columbus?

A. Yes, sir, we did.
174 Q. You were employed by the City of Columbus?
A. Yes, sir.
Q. What was the finding as to the proper price for the City of Columbus?

By Edward Kibler: I object.

Q. Based upon the conditions in this field.

By Edward Kibler: I object.

The Court: Do you adjourn usually at 4:30?
By Edward Kibler: Yes, sir.
By Judge Douglass: Well, I will submit my authorities in the morning.
The Court: I would be glad if you would put them on paper and give them to me now.
By Judge Douglass: All right.
The Court: We will adjourn now until tomorrow morning at 9 o'clock.

(Here court adjourned until 9 o'clock tomorrow morning.)

175 (9 o'clock a. m., Morning Session.)

SAMUEL S. WYER.

Direct examination (resumed).

Examined by Judge S. M. Douglass:

Q. Mr. Stenographer, read the last question.

(The Stenographer read the last question.)
By Roderic Jones: That is objected to.
The Court: I will hear from counsel upon that proposition.
(After argument to the Court):
By Judge Douglass: Well, I will withdraw that question.

Q. Mr. Wyer, do you know the net price fixed and in operation in the City of Columbus?
A. Thirty cents.

By Edward Kibler: I object to that.
The Court: The answer may go out.

Q. Do you know?
A. Yes.
Q. What is that price?

By Edward Kibler: I object. That is not the way to prove it.

Q. What is that price?

By Edward Kibler: I object.
The Court: He may answer.

176 A. The net price is thirty cents.
Q. Who was associated with you?

A. Prof. Hitchcock.

Q. After the investigation which you made, and which you largely detailed here yesterday, what price did you report to the City of Columbus as being a fair and reasonable price?

By Edward Kibler: I object.

The Court: Read the question?

(The Stenographer read the question.)

The Court: I think the witness should be permitted to say what would be a reasonable price, but whether what he reported to Columbus——

By Judge Douglass (interrupting): Well, I will cut out that question.

Q. What, from your investigation, and your knowledge, would be a fair and reasonable price?

By Edward Kibler: Do you mean in Columbus?

By Judge Douglass: Yes, sir.

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

177 A. I can answer that best by referring to this diagram. (Indicating diagram.)

By Judge Douglass: I wish the Stenographer would read the question.

(The Stenographer read the question.)

A. Our investigation there showed——

By Edward Kibler (Interrupting): I object.

Q. From everything that you know, what would be a reasonable price at Columbus?

By Edward Kibler: I object.

A. Forty cents.

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception. And I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Now, Mr. Wyer, you may show the factors that enter into your answer, that forty cents would be a reasonable price at Columbus.

By Edward Kibler: I object. If we want to cross examine him——

The Court (Interrupting): The objection is sustained.

178 Q. Mr. Wyer, will you take this chart and hang it on the blackboard. I want to ask you a few questions about it.

(Witness hangs chart on the blackboard.)

Q. Who made that chart?
A. I made it myself.
Q. Have you brought it up to date?
A. Yes, sir.
Q. You may take up the factors which determine the cost of natural gas.
A. The object in making the diagram is to show——

By Edward Kibler (Interrupting): I object.
The Court: Just answer the question.

Q. Explain them to the court.
A. The first division is: The fixed charges, and second: The variable charges. Under the head of investment are, First: Intangible property, and, second: Physical property. The first factor that we have is the investment. That, worked out in detail, as to the intangible property, includes: The promotion cost; the organization cost of the company, interest during construction, taxes during construction; lease rentals during construction. The second factor is the physical property. That includes the field property—the wells, lines and compressors. The transmission line, distributing system, headquarters, and real estate. The real estate which may be owned. The cost of developing business; the working capital. You have the investment which gives a basis for computing the schedule of rates.

The second main factor, after you have fixed the investment, is the depreciation on the total investment. You have first the depreciation on the intangible property, which includes the services, and the rights; and on the physical property, which includes the
179 inadequacy, obsolescence and accidents, electrolysis, and depletion of the supply.

Q. You carry the lease rentals as intangible property.
A. The lease rentals are similar in principle to interest during construction, and taxes during construction.
Q. Is that because there are no earnings?
A. Yes, sir.
Q. Explain the depreciation of the intangible property.
A. After you have your complete plant in operation, you have expended a large portion of the investment in creating the intangible property. A part of it consists of services performed in getting the property into existence, and on an operating basis. The rights include easements, franchises and so forth, which might be further classified as those which terminate after a certain fixed time, and whose which are abandoned. All of those represent investments which are constantly shrinking.

Under the head of fixed charges, we have, first: The maintenance of the property; the taxes, the insurance, the executive expenses, and the well royalties on annual basis, and the return on the investment. The object of the sinking fund is to keep the investment intact. It is a provision so that after a certain period of years, the original capital invested shall be intact. If the property which was purchased has been worn out, then the equipment ought to be found in the sinking fund, so that the original capital will not be destroyed.

Interest on the investment: There is a clear distinction between interest on investment, which is simply the money paid for the use of the capital, and the profit which comes from the skill and
180 business management, and the risks assumed. In other words you have to consider, first: The legal rate of interest; and, second: The profit in addition to the interest.

Maintenance; taxes; insurance; executive expenses; well royalties; and return on investment. Those are the fixed charges. They are absolutely fixed, and would go on even if the company were to stop serving all of its consumers. For that reason the fixed charges have a very important bearing in determining the cost of gas.

Taking all these things together, we have the first main division, or the fixed factors, in the cost.

The second division is: The variable. We have, first: The ratio of connected load, and maximum demand. Second: The gas yield of the wells. If you were to take the aggregate maximum demands of all the consumers, and take the connected load, you would find that the connected load would be larger in the aggregate than the maximum demand; due to the fact that there is a condition of the load that is due, first, to the fact that not all consumers are using the gas during certain periods, and others are not using the gas at all, and you will find that your connected load will be somewhat larger—that is, the aggregate is somewhat larger than the maximum demand.

We have, under the gas yield of wells: Gas that is sold; next, the free gas—donated; and the gas that is lost, and gas that is used in the plant.

Q. Do you mean by leakage when you speak of gas that is lost?

A. Yes, sir; in transmission, and in other ways. Your total capacity in the field will be very much greater than your selling capacity to the consumers.

181 Q. What does gas used in the *plat* refer to?

A. Around the compressor stations, for operating the large compressors.

Q. What per cent is usually used at the compressor stations?

A. From four to five per cent of the volume passing through is used at the station. This analysis must be worked out in detail for the reason that the open flow capacity of the wells in the field—that is the aggregate open flow capacity is very much larger than the delivering capacity of those wells to the gathering line.

We have our gas then, ready for transmission. We get the gas to the gates of the town, and it is metered there. The distributing company will then have a further shrinkage in the volume. It is impossible to make the system tight. It is about one thousand to one as compared with water. The leakage tendency is one thousand times greater than would be the leakage tendency with water in those same mains at the same pressure. That indicates the great difficulty in keeping the gas joints tight, and is one of the large factors which must be considered, due to the fact that the gas company must stand all the shrinkage.

By the time the gas gets to the consumer's meter, the ratio of the volume of the open flow capacity of the field, especially in an old field is relatively very small. If there would be a slight variation, depending up- the individual characteristics. It is doubtful whether over eight or nine per cent of the open flow capacity of the field is actually available for sale and earning money on the basis of the meter reading.

The next is the running cost. This is variable, and depends upon the volume of the business. First: The oil; the supplies;
182 repairs; labor; legal expenses; office expenses; interest on running accounts; well royalties on quantity basis—that is, based on a sufficient quantity basis, where the expense will vary with the amount of gas purchased. Taxes on earnings or output; local taxes, state taxes, and federal taxes. All forms of taxes do not tax the company, but simply place the burden on the consumer. Whatever burden is placed on the company, must be paid by the consumer. Therefore, all these different forms of excise taxes, tax the ultimate consumer and do not tax the company, and are simply collected by the company as a matter of convenience. The next is bad accounts. With a large company, that is always a prominent factor. Travelling expenses, and contingencies.

Revenue from byproducts. Whatever money would be obtained from these would go towards decreasing the cost of the gas.

Profit: It is entirely distinct from interest. To compensate for the business ability in the management and the risks assumed.

Customers' use of gas. The first division that we have is the time. It makes all the difference in the world as to what time of day the consumer is using the gas and also the number of hours.

Another subdivision that must be considered is the work. That is, as to whether it is domestic or industrial work. A factor that must be considered is the distinction between the distributive and the producing and the transmitting end of the business. That is, in a case situated as you are here at Newark, you have a certain investment in the town. The rate for that must be based upon the valuation——

183 By Roderic Jones: I object.

The Court: That is probably an argument.

By Roderic Jones: Certainly.

Q. Point out what ought to be considered as elements.

By Roderic Jones: I object.

The Court: The objection is overruled.

By Roderic Jones: Note an exception.

A. The first element which ought to be considered is to make a clear distinction between the distributing end of the business and the production and the transmission end. In the distributing end, the amount ought to be based on the true valuation of the property used by the distributing company.

By Roderic Jones: I move to rule out the answer.

The Court: The court thinks the witness has a right to give an opinion as to what goes in to make up the value of gas. Proceed.

A. The first distinction that must be made is to make an analysis or distinction between the distributing burden and the burden in bringing the gas to the gates of the town. After you have the gas to the gates of the town, you then have a basis of price to work on, and the burden that the distributing company ought to add to
184 *what* wholesale price; it ought to be based upon the value of the distributing company's property, and which valuation ought to be considered—first: The intangible property; second: The physical property; third: The cost of developing the business, and fourth: The working capital. This ought to be based entirely on the matter of valuation. The distributing company in this case being placed exactly in the same position that an artificial gas company is. For instance, in the purchase of its raw fuel. That is, it simply purchases the fuel, and then, by some changes in the form of the fuel, takes that as a basis.

The first basis that you have in determining what is a fair rate is: What will be a fair rate for the gas at the gates of the City of Newark?

By Edward Kibler: I move to rule that out. It is merely argumentative.

The Court: The latter part may go out.

The Witness: I do not believe it would be possible to arrive at the retail price to the consumer, which is made up of two distinct elements: First, the wholesale price at the gates; and second. The burden that is added to that wholesale price for distribution; without ascertaining what would be a fair price at the gates on which to base the per cent that is to be added for the distributing service.

By Edward Kibler: I move to rule out that answer.

The Court: The motion is overruled.

185 By Edward Kibler: Note an exception.

A. After having fixed what would be a fair price that the gas can be purchased for under prevailing market conditions, and considering all the hazards involved——

By Edward Kibler: I move to rule that out. It is an argument.

The Witness: I have spent about six years in studying public utility problems, and I believe I know more about the rates than any of the attorneys here, and if they will allow me to proceed and analyze the question——

By Edward Kibler: Well, he is not above the rules of the court, and I reserve the right to object when I think his testimony is not competent.

The Court: Proceed.

Q. You may proceed with anything further that you have to say in reference to what forms the proper cost of gas up to the gates of the city. Did you finish your answer?

A. Yes, sir, I finished that.

Q. Now, proceed to the distribution end within the city limits.

A. The same general principles will apply in determining the cost for distributing the gas which prevail in the general analysis which was given before. Some of the operating details would go out, but the principles would be identical in fixing the retail schedule of rates.

The Court: We will take an intermission of about three minutes.

186 (Here the court took a recess.)

(After the recess.)

Q. What is the percentage of cost, or fixed charges, in public utility enterprises?

By Edward Kibler: I object.

Q. If there is such.

By Edward Kibler: I object.

Q. In the natural gas business.

A. The fixed cost runs approximately 73%, and the variable cost 27, as shown here—(indicating on chart marked F).

Q. How does that differ if at all as to other public utilities?

By Edward Kibler: I object.

The Court: The objection is sustained.

Q. I will ask you this question: Have you stated the hazards necessarily incident to the natural gas business—all of them? Did you do that yesterday?

A. It was not analyzed in detail.

Q. I will ask you now to state, without too much detail, the hazards directly incident to the production, transmission and distribution of natural gas.

A. The first factor that you have to consider is that you are dealing with a fuel over which you have no control at all, as far as quantity and quality are concerned.

187 By Edward Kibler: That was gone over before.

The Witness: The second is that, in the natural gas business, the percentage of fixed charges are higher than in any other utility service. Therefore, the hazard is larger than in any other utility services. The third factor is that the natural gas business, as far as the production is concerned, is essentially a mining proposition, with more unknown features than exist even in ordinary coal mining operations, due to the fact that, in prospecting, it is very much harder to trace a definite outline of your supply under the ground than it is with a solid mineral like coal. Those are the essential elements as far as the hazard is concerned.

Q. Are you acquainted with the geographical area of the natural gas fields of Ohio?

A. I am.

Q. Can you give approximately the area that is operated by all the large companies? Can you give the area?
A. No, sir, I could not in square miles. I didn't compute that.
Q. How many fields are there?
A. There are three in Ohio at the present time.
Q. Have you ever computed the length, north and south?
A. I have never computed the number of miles.
Q. Name them.
A. The Sugar Grove field, the Utica field and the Ashland field.

By Judge Douglass: You may cross-examine.

188 SAMUEL S. WYER.

Cross-examination.

Examined by Edward Kibler:

Q. What did you say your name is?
A. Samuel S. Wyler.
Q. How long have you lived in Columbus?
A. About thirteen years.
Q. Where did you go to school? Where did you graduate?
A. Ohio State University.
Q. Did you go anywhere else in your scientific educasion?
A. No, sir.
Q. In what class did you graduate?
A. In 1903.
Q. When did you first devote your attention to the natural gas problem?
A. I have been studying natural gas for about five years.
Q. What work did you first do?
A. I started in originally in private work.
Q. What kind of work?
A. For investors. Examining natural gas property.
Q. What did you first do in examining natural gas property? And when?
A. I couldn't fix the exact time. I have been doing engineering work.
Q. What sort of work have you done in the natural gas fields?
A. Well, I made a detailed examination of the Sugar Grove field and the Homer field, as far as the property of the Columbus Gas and Fuel Company was concerned. Just recently, I made a detailed examination of all the property of the Kansas Natural Gas Company in Kansas.
189 Q. When did you make an examination of Oklahoma field?
A. Last November and December.
Q. In Ohio, you examined the Sugar Grove field?
A. Yes, sir.
Q. Did you go all over it?
A. Practically the entire field.
Q. Did you examine each well?

A. No, sir. There were several assistants. It would be impossible to do that.

Q. I wanted to know whether you did it or not. Do you know how many wells you examined in that field?

A. There were thirty-five wells tested there under our direction.

Q. Well I didn't ask that. How many did you examine personally?

A. I don't recollect the exact number.

Q. Have you written anything on the subject of the natural gas problem?

A. Not on natural gas alone, but as to public utility problems in general I have given a good deal of time.

Q. Have you published anything on the subject of natural gas?

A. No, sir.

Q. What book did you have reference to in your testimony yesterday that you had either severally or jointly written?

A. A text book on gas and oil engines, with Prof. Mark of Harvard University.

Q. On oil and gas engines?

A. Yes, sir.

Q. You have just been ten years out of college?

A. Not quite ten.

Q. It will be ten years next June?

A. Yes, sir.

Q. And after you finished your course at the Ohio State University, you did not go to college?

A. I went into engineering work at once.

190 Q. Practical work?

A. Yes, sir.

Q. For five years, you followed civil engineering?

A. I have had a general engineering practice; part of the time in mining work and in mechanical work and in manufacturing work.

Q. Was the investigation of the Sugar Grove field the first experience you had in natural gas properties?

A. No, sir.

Q. I mean, beyond your civil engineering work?

A. I had examined small individual properties before that time.

Q. Out of curiosity, or were you employed to do that?

A. I was employed to do that.

Q. Where?

A. The Sugar Grove field and the Utica field.

Q. For whom were you acting?

A. For confidential clients.

Q. Was it the Newark Natural Gas and Fuel Company?

A. No, sir.

Q. Was it the Logan Company?

A. No, sir.

Q. Was it the Union Company?

A. No, sir.

Q. Were you ever employed by the Logan Company?

A. I have been in the past, yes, sir.

Q. In what way?
A. Consulting engineer.
Q. How long were you employed by them?
A. I have done work for them off and on for five or six months.
Q. Are you now on their pay roll?
A. I do work for them every month.
Q. You are on their pay roll every month?
A. I do work and render a bill.
191 Q. You are employed by them every month and you have been for five or six months?
A. I do some work.

By Edward Kibler: Read the question.
(The Stenographer read the question.)

A. I have been retained by them, and have done work each month for five or six months.
Q. When was the first work that you did for the Logan Natural Gas Company?
A. Last July or August.
Q. That was your first employment?
A. Yes, sir, by the Logan Company.
Q. Were you ever employed by the Union Company of Pittsburgh?
A. No, sir.
Q. And you never did anything for them in the way of professional service?
A. No, sir.
Q. Has the Union Company any connection with these properties out west that you examined?
A. I couldn't answer that. I don't know.
Q. You don't know whether Mr. Barnsdahl has any connection with it or not?
A. I have no knowledge, as to that.
Q. Has he any connection with the Oklahoma field?
A. I have no knowledge that he has.
Q. You don't know?
A. No, sir.
Q. Do you know him personally?
A. I never saw him.
Q. Have you ever been employed by him in any way?
A. No, sir, not to my knowledge.
Q. What work have you been doing for the Logan Company in the last five or six months?
A. Along electrolytic lines. Electrolysis trouble in different towns, and some rate matters.
192 Q. What rate matters?
A. I don't know as I would want to disclose that. That is outside of this case. That is a confidential matter and ought not to be discussed in court.
Q. Are you a regular employe of them on rate matters?
A. I am not.

Q. How many different rate employments have you had for them?
A. I couldn't state the exact number.
Q. I mean for which you charged?
A. Oh, perhaps half a dozen.
Q. Half a dozen?
A. Yes, sir.
Q. Are you connected with their headquarters in any way?
A. No, sir.
Q. Have you an office with them?
A. No, sir.
Q. Did you ever have?
A. No, sir.
Q. Have you a separate office?
A. Yes, sir.
Q. What is the name of your business?
A. Consulting engineer.
Q. You have no partner?
A. No, sir.
Q. Who is Prof. Hitchcock?
A. He is Professor of engineering at the Ohio State University.
Q. Has he done any work for the Logan Company?
A. I couldn't say whether he has or not.
Q. He has not joined in any of the work that you have done for that company. What other field did you examine besides the Sugar Grove field?
A. The Utica field.
Q. You made an examination of the Kansas field and the Oklahoma field?
A. Yes, sir.
Q. Is that the extent of your experience?
A. It is as far as the examination of properties is concerned.
193 Q. And the examination of rates—have you had any other experience in natural gas problems or properties—physical property?
A. No experience outside of the routine engineering practice.
Q. You were never employed by a company to work in its office—by a natural gas company?
A. No, sir.
Q. You never had any experience in the management of a natural gas company?
A. No, sir.
Q. Or in the field work?
A. No, sir.
Q. Or in drilling wells?
A. No, sir.
Q. Or gauging wells?
A. Yes, sir, I have.
Q. Outside of your experimental work that you have mentioned?
A. It has been restricted to those fields.
Q. Was it in connection with your examination of those four fields?

A. Yes, sir.

Q. You never worked as an employe of a natural gas company except in your professional capacity?

A. I did not.

Q. And you have not had any practical experience in the field operating work?

A. A professional man is not supposed to.

Q. Well, I want to know whether you did or not?

A. Certainly not.

Q. I simply wanted to know what experience you have had.

The Court: We will adjourn now until one o'clock.

(Here court adjourned until one o'clock p. m.)

194 (One o'clock p. m.)

SAMUEL S. WYER.

Cross-examination (resumed).

Examined by Edward Kibler:

Q. How long were you engaged, Mr. Wyer, in investigating the Sugar Grove field? How much time did you give to the territory?

A. I have no separate record between that and the Homer field.

Q. Did you do the two at the same time?

A. Yes, sir.

Q. You don't know how many days you were on the territory?

A. No, sir. I have no record of the exact amount of time spent. The investigation took from about the middle of March until the last week in August.

Q. Well, I don't refer to the time that it took you to make the report, but how much time you spent on the territory itself?

A. I have no record as between the two fields. I don't know the exact time.

Q. How many days did you spend in the field?

A. That is two years ago, and I haven't any clear recollection about that. I spent about thirty days all told in the two fields.

Q. How many wells did you examine altogether in the two fields? I am speaking about yourself, personally?

A. Scattered all over the field, perhaps seventy or seventy-five wells. I cannot tell exactly.

Q. That include both fields?

A. That is the north field.

Q. What do you mean by that?

A. The field around Newark.

195 Q. The Homer-Newark field?

A. Yes, sir.

Q. That does not include the Sugar Grove field?

A. No, sir.

Q. You made personal examination of those seventy wells?

A. Yes, sir. I don't know exactly the number.

Q. And you don't know how many in the Sugar Grove field?
A. No, sir.
Q. Was the examination of both fields a continuous employment?
A. Yes, sir.
Q. For whom were you acting?
A. The City of Columbus.
Q. What companies operated in those two fields when you made the examination?
A. I could not give the names of all of them. The Central Contract and Finance Company in the Sugar Grove field, and the Ohio Fuel Supply and the Logan Company and the City of Lancaster; and a large number of small local companies.
Q. How old is the Sugar Grove field?
A. The active operation was started in 1895.
Q. And there are still wells producing there?
A. Yes, sir. A very low rock pressure.
Q. How many producing wells are there there now?
A. I don't know.
Q. How many active wells were in the field when you made the examination?
A. The Columbus Gas and Fuel Company's property included thirty-five wells at that time.
Q. How many wells were in the field?
A. I have no record about the total number.
Q. You have no idea?
A. No, sir.
196 Q. Were they drilling wells in that territory at that time?
A. Not in the older part, but in the outskirts they were.
Q. What do you mean by the Sugar Grove field?
A. That is an indefinite term which is applied to practically all the development around the Village of Sugar Grove and the compressor station near there.
Q. Which company built the compressor station?
A. The Columbus Gas and Fuel and the Logan Company and the Ohio Fuel Supply, each had one there.
Q. How far north do the wells extend?
A. That pool runs up and merges with the Knox pool, and that merges with the Ashland pool.
Q. That is the term that you use to designate the gas underneath?
A. That is used by the gas companies.
Q. How near to Licking County does the so-called Sugar Grove field that you have described extend?
A. That could not be stated definitely, because it is largely a matter of local opinion.
Q. Are the wells in southwestern Licking County a part of that district?
A. There are a number of isolated pools there.
Q. Do they extend through Perry County?
A. I would not be able to answer exactly.
Q. Fairfield?

A. Yes, sir.
Q. Licking County borders Fairfield at the southwest part?
A. Yes, sir.
Q. And it passes into the Licking district by a chain of wells?
A. It is considered a continuous formation from Hocking
197 County to the northern line of Clinton Township in Knox County.
Q. What distance is that?
A. About sixty miles.
Q. The Homer and Utica field is in what township in Licking County?
A. That is a very loose term, used differently by different people. You could not define that clearly.
Q. Do you know what townships in Licking County have had producing wells?
A. Bennington, Burlington, Washington, Eden, McKean, Liberty, St. Albans, Granville, Union and Licking.
Q. That tier of townships goes from the south county line to the north county line, and passes to the west of Newark Township, in which Newark is located?
A. Yes, sir, that is true.
Q. And there are active wells in all those townships?
A. I would not be able to state whether there are in every one or not.
Q. How many different companies are operating in Licking County?
A. The Columbus Gas and Fuel; the Ohio Fuel Supply Company; the Logan Company; the Columbus Natural Company and there are several local companies around Utica.
Q. And the Heisey Company?
A. Yes, sir.
Q. The Everett Company?
A. I have no knowledge of it.
Q. You don't know about that?
A. I never had any occasion to examine that.
Q. Did you ever examine the Heisey wells?
A. I have examined some.
198 Q. What companies are operating in this County? Do you know?
A. The Ohio Fuel Supply Company has wells up there, and the Logan Company, and several local companies.
Q. Do you know their names?
A. No, sir, I didn't pay attention to that.
Q. Do you know how many producing wells have been found in Licking County——
A. No, sir.
(Concluded:) Since 1875.
A. No, sir.
Q. Do you know when the first natural gas well was discovered in Licking County?
A. No, sir.

Q. What wells did you examine in Licking County when you made this investigation?

A. J. Rhodyback, No. 1, Mary Holler, No. 1, Maggie Hawkins, No. 4, Maggie Hawkins, No. 3, J. W. Jordan, No. 1, S. W. Davis, No. 1, H. Wince, No. 2, H. Raney, No. 1, D. Erwin, No. 2, T. Richards, No. 1, Maggie Hawkins, No. 2, C. Hough, S. L. Haas, No. 5, J. Wince, No. 3, H. Bell, No. 2, S. L. Haas, No. 4, S. S. Devinney, No. 1, J. Wince, No. 2, E. Belt, Maggie Hawkins, No. 1, Simon Haas, M. Goodridge, No. 2, E. Belt, No. 2, S. S. Devinney, M. Downer, No. 3, H. Wince, No. 1, W. H. Wilson, No. 1, B. Williams, No. 2, J. R. Haas, No. 1, Rovena Neff, No. 2, M. Downer, No. 2, J. Wince, S. L. Haas, No. 1, S. L. Haas, No. 3, F. and C. Smith, No. 1, Ham Conrad, No. 1, E. Jones, No. 3, C. Roberts, No. 2, H. Bell, No. 3, M. Goodridge, No. 1, Phœbe Smith, No. 1, C. Roberts, No. 3, C. Slife, No. 1, F. M. Brooks, No. 1, J. R. Haas, No. 2, M. Barber, No. 1, Belle Williams, No. 1, S. L. Jones, No. 2, Rovena Neff, No. 1, J. F. Holler, No. 1, E. L. Jones, No. 1, G. Miller, No.
199 1, Eagle, No. 1, David Owens, No. 2, T. Brooks, No. 1, C. Roberts, No. 1, W. Williams, No. 1, M. Brooks, No. 2, M. Downer, No. 1, Andrew Patton, No. 1, W. Williams, No. 2, John Williams, No. 2, John Williams, No. 3, John Williams, No. 3, John Williams, No. 2, A. F. Stanton, No. 1, Wm. Owens, No. 1, David Owens, No. 1, Robert Adams, No. 1, Wilber Crooks, No. 1, Wm. Neighbarger, No. 1, Jennie Buster, No. 1, Kate Pence, No. 1, C. M. Haas, No. 1, M. Brooks, No. 3, P. Brooks, No. 2, Wm. Reynolds, No. 2, Kate Pence, No. 2, Henry Bash, No. 1, M. Brooks, No. 4, S. McNaughton, No. 1, James Smith, No. 1, James Meachen, No. 1, C. Stimson, No. 1, James Ransower, No. 1, Jacob Warner, No. 1, W. H. Douglass, H. Bell, No. 1, A. J. Wilson, No. 2, A. J. Wilson, No. 1, P. Brooks, No. 1, A. J. Wilson, No. 2, D. Brooks, No. 1, T. R. Edman, No. 1, George Dunlap, J. Ransower, No. 2, W. B. Vance, No. 1, W. B. Vance, No. 2, W. Edmond, No. 1, G. Hansholder, No. 1, G. Hansholder, No. 2, Emma Dumbald, No. 1, J. R. Boid, No. 2, Emma Dumbald, No. 3, Emma Dumbald, No. 2, C. Houck, No. 1, W. H. Douglass, No. 1, John Batley, No. 1, Homer Hawkins, No. 1, David Jaeger, No. 1, A. Chammell, No. 1.

Q. Did those wells belong to any particular company?

A. Yes, sir, to the Columbus Gas and Fuel Company.

Q. Do you know the number that you have given?

A. No, sir, I didn't count them.

Q. Did you ever examine any of the territory of the Logan Company?

A. Not at that time.

Q. Did you ever?

A. I did several years ago, but not since I did work for them.

200 Q. How many wells did that company own?

A. I couldn't tell that.

Q. How many acres have they of leased land?

A. I don't know the amount.

Q. In how many different counties do their leases extend?

A. I couldn't answer that.
Q. Do you know what companies sell gas to the Logan Company?
A. I have some information, but I don't think best to disclose that.

By Judge Douglass: We object.

A. It is confidential information.
Q. Why is it confidential information?
A. Because I represented half a dozen gas interests.
Q. What interests?
A. Just now I take of the work of the Ohio Fuel Supply Company which embraces over one hundred towns in Ohio; for the East Gas Company; the National Heat and Power Company of Missouri; consulting engineer for the Ohio Gas Association, which is an organization of operating companies, and embraces practically every operating company in Ohio.
Q. What work do you do for them?
A. I am consulting engineer with special reference to rate matters.
Q. How long have you represented any gas company in reference to rate matters?
A. About a year. I don't remember exactly.
Q. In how many controversies have you participated for them?
A. This is the first rate public controversy in Ohio.
201 Q. How many gas companies have you been connected with?
A. Perhaps fifteen or twenty.
Q. Within the last year?
A. Within the last few years.
Q. And you have no knowledge of the extent of territory, or the acreage or wells of the Logan Company?
A. Not being connected with that company, I have no knowledge of its operating details.
Q. Then the chart that you made in reference to that territory, did not come from any personal examination that you made?
A. That did not show the leased territory, or the property of any one company.
Q. It showed the wells?
A. Yes, sir.
Q. What companies are shown on that chart?
A. The Ohio Fuel Supply Company, the Columbus Company, and the Logan.
Q. And the wells of those companies are the only ones which are shown on that map?
A. Yes, sir.
Q. What was the object in showing the wells of only these three companies?
A. That chart was prepared for another case. I happened to have it ready, and used it in this case.
Q. This examination for Columbus was made how long ago?
A. About two years ago. It will be three years ago this coming spring when it was started.
Q. Were you ever retained by any gas company previous to that time?

A. Not a natural gas operating company.
Q. Did you do any rate work for them?
A. Not on natural gas prior to that time.
202 Q. Were you employed by the Logan Company before that time?
A. No, sir.
Q. Or the Ohio Fuel Supply Company?
A. No, sir.
Q. Or the Columbus Gas and Fuel Company?
A. No, sir.
Q. How soon after that were you employed?
A. After the report for the City of Columbus was made, I didn't do any work for any gas company in Ohio inside of about 18 months.
Q. What was the first employment that you had?
A. The Ohio Fuel Supply Company.
Q. What was that?
A. Consulting engineer on rate matters.
Q. How soon after that were you employed by the Logan Company?
A. Several months. I don't recollect the exact time.
Q. What employment was that?
A. A rate matter, and also electrolysis. Primarily electrolysis.
Q. When did you make the Kansas investigation?
A. In November and December, 1912.
Q. How long were you engaged in that?
A. Two months.
Q. How much time did you devote to the field?
A. About 31 or 32 days in the field, and in examining the other property of the Company.
Q. Do you know how many wells were examined?
A. It was impossible to examine each well.
Q. Assuming that to be true, can you answer the question?
203 A. The commission, of which I was a member, made an examination of about one-tenth of the number of wells; a personal examination. The staff made the examination of the others, under our directions.
Q. And you didn't examine, personally, the wells?
A. I did of about one-tenth.
Q. And you accepted the result of the examination of others as to the balance?
A. Yes, sir.
Q. In reference to the Oklahoma engagement—was that the same employment?
A. Yes, sir. The property extended over the two states.
Q. Can you furnish the information that I asked for a while ago, as to how many wells there are in the Ashland field and the Homer and Sugar Grove fields?
A. I couldn't from memory.
Q. Well, can you from any source?
A. The Ohio Gas Association has that information in the office.
Q. You spoke about the rock pressure in this field. I want to know what personal knowledge you have as to that.

A. From personal examination of wells at different times, during the life of the field, and an examination of the Company's records.

Q. Have you any record of your examination of the rock pressure?

A. I don't happen to have my files here.

Q. When you say that the rock pressure was 750 pounds, you get that from other sources than your own investigation?

A. I get that from an examination of the records,——

Q. And when you speak about its being below 300 pounds, where do you get the information?

A. From a combination of my own observation and other records.

204 Q. When did you make any examination for rock pressure?

A. In the field, when we were making an examination for Columbus, and several other times in private investigation.

Q. Have you examined any wells in the Ashland field?

A. No, sir.

Q. Where are there any compressors in Licking County?

A. At the station of the Columbus Gas & Fuel Company; east of Johnstown; that is the large station; and near Homer. The station of the Ohio Fuel Supply Company is near Homer. The Columbus Natural Gas Company has a station near Granville.

Q. Explain what the process is.

A. The gas enters on the in-take stroke at the pressure which the wells furnish through the transmission line; that pressure will vary through a considerable range in different seasons of the year; that pressure coming to the in-take side would be about 45 pounds per square inch above the atmospheric pressure; and if the Gas Company was to take the gas at that pressure and attempt to transmit it to Columbus, the cost of the investment——

Q. (Interrupting.) I want you to describe the mechanical process.

A. The gas is taken and delivered to the cylinder, and, by means of the work done, the pressure is increased from forty to say two hundred and seventy-five pounds, and delivered to a cooler to extract some of the heat and fit it for transportation.

Q. Do you know the capacity of the compressor at Homer?

205 A. It is in Bennington Township. The compressing capacity of the station, at 35 pounds in-take pressure, is twenty million cubic feet in 24 hours.

Q. The pressure is increased?

A. Yes, sir.

Q. And it is delivered into the transmission line?

A. Yes, sir.

Q. Do you know how many wells are connected with the compressor?

A. It changes every day in the year.

Q. The Company is still engaged in drilling wells in that territory?

A. In the territory between here and Mt. Vernon. During the time we were making an inventory of that property, about ten per cent. of the number of wells were abandoned, and it was necessary to correct the inventory accordingly.

Q. Isn't the Logan Company drilling in this territory, in Licking County?
A. Yes, sir.
Q. And the Columbus Gas & Fuel Company?
A. Yes, sir; but the development is away from the compressor station.
Q. Are they drilling in this territory?
A. Yes, sir.
Q. Is there any connection between the Ashland territory and this territory—pipe line connection.
A. Yes, sir.
Q. Who owns it?
A. The Ohio Fuel Supply Company has a line, and the Logan Company.
Q. Has the Columbus Company?
A. I couldn't answer that.
Q. How is the West Virginia gas delivered to the Logan Company?
A. Through a pipe line from West Virginia.
Q. To what point?
A. I couldn't name the exact location.
206 Q. It is on the Ohio River somewhere?
A. Yes, sir.
Q. Who owns the line?
A. The Ohio Fuel Supply Company owns one line between the Ohio River.
Q. Has the Logan Company any line to the Ohio River?
A. I couldn't say whether it is completed or not. It is being constructed.
Q. How long has the Ohio Fuel Supply Company had a line to the Ohio River?
A. I couldn't answer that.
Q. For several years?
A. Yes, sir.
Q. How long has the Logan Company been getting West Virginia gas?
A. I couldn't answer that. They got gas there before I did any work for the Company.
Q. Do you know through what line they got it?
A. There are several ways that gas can be brought across. I don't know how they are getting it.
Q. What is the age of the Ashland field?
A. I couldn't say just when the first well was drilled. Within the last three years.
Q. Do you know the number of wells in the Ashland field?
A. No, sir, I couldn't tell here; there is a record in the office.
Q. Which office?
A. The Ohio Gas Association. They have that data.
Q. You don't know the number of wells which have been drilled in Ohio?
A. I couldn't give the exact number, nor, sir.

Q. Can you approximate it?
A. No, sir. I was never interested in that.
Q. Does it cost any more to drill a dry hole than a good one?
A. Do you mean the actual cost of drilling the hole?
207 Q. Yes, sir.
A. It would be about the same. If it is a dry hole, you lose the investment.
Q. Have you any record of the number of dry holes?
A. I haven't here. I have the record of one operating company, which is typical.
Q. What is that record?
A. I am mistaken about it. That feature is not given.
Q. Do you know what it costs to drill a hole in this vicinity? And what depth they go?
A. It varies; four or five thousand dollars.
Q. To what depth do they go?
A. I couldn't answer that from memory. They vary.
Q. Have you any knowledge of the price charged by these producing companies to distributing companies for gas furnished?
A. I have some information along that line, but I couldn't quote very much of it from memory.
Q. You didn't bring that along with you?
A. No, sir.
Q. What is the source of your information?
A. Actual records of the Companies.
Q. What Companies?
A. The Ohio Fuel Supply Company, the Logan Company, Columbus Gas & Fuel; Kansas Natural Gas Company, Joplin Natural Gas Company, and East Ohio Gas Company.
Q. Where is that East Ohio Gas territory?
A. In West Virginia. It is a pipe line proposition, connecting Cleveland and a number of small towns in the eastern part of the State.
Q. Are there any wells in that territory on the Ohio side?
A. Not immediately adjacent to that line. There is near
208 St. Clairsville, but that doesn't supply any gas to that line.
Q. You said that as far as a distributing company is concerned, their rate problems are about the same as an artificial gas company. Did you say that?
A. I did.
Q. And if the distributing company can get gas at a fixed price for a definite time, then the problems, so far as the rates are concerned—to ascertain what would be a reasonable profit would be simpler than with an artificial gas company?
A. They would be similar, not simpler.
Q. They wouldn't have the hazard to contend with, would they?
A. Yes, sir, more. No distributing company could make a contract for a period long enough into the future, which would run during the entire life of the plant.
Q. Well, say for ten years. If they had a contract for ten years for their gas at a certain price.

A. Ten years wouldn't be long enough.

Q. Suppose you get your supply for ten years at a fixed rate.

A. You cannot get in on that basis. No company would be fool enough to make a guaranty to supply gas for ten years.

Q. Well, suppose that they did do it, as a matter of fact. Then the problem would be simpler to ascertain what would be a fair return on the investment, wouldn't it, in your judgment, if those facts were so?

A. If the pipe line company would agree to furnish gas for ten years and put up an adequate deposit which would be a sufficient guaranty to cover——

Q. (Interrupting.) I didn't speak about a guaranty. Leave that out. Suppose that the company had the gas, and did it for
209 ten years; wouldn't that simplify it?

A. No, sir.

Q. It would complicate it, in your judgment, would it?

A. Yes, sir, it would.

Q. Is any of the West Virginia gas going to Columbus?

A. Yes, sir.

Q. And the Cleveland gas comes from West Virginia?

A. Yes, sir.

Q. Where else does the West Virginia gas go?

A. To Cincinnati.

Q. And the Logan Company gets a part of it?

A. Yes, sir.

Q. Does any other company that operates in this territory get any West Virginia gas?

A. I couldn't answer about them.

Q. What knowledge have you about the leakage?

A. When we made an investigation for Columbus, we made a careful test to determine the amount in the 26 miles of transmission line between the compressor station east of Johnstown and the reducing station in Columbus.

Q. Were there any openings?

A. There were none——

Q. There weren't any connections anywhere on the 26 miles?

A. No, sir.

Q. Any pipe lines or service lines?

A. No, sir.

Q. That was your information?

A. Yes, sir.

Q. Did you dig down to see?

A. No, sir. An engineer doesn't have to do that.

Q. Did you have a "divining rod?"

A. No, sir; we closed the gate at Columbus—closed the gate at both ends, and noticed whether the gauge dropped.

210 Q. You don't know what the leakage was, do you?

A. I do.

Q. How did you know that?

A. By engineering demonstration.

Q. How did you know that?

A. For the reason that an engineer knows a large number of things——

Q. How did you demonstrate that any certain amount was leakage?

A. We closed the gate at both ends with a fixed pressure, and computed the drop in the pressure; and found later on, by having Prof. Hitchcock at the Columbus end with an instrument, which was correct, and myself at the Johnstown end, with a similar instrument, and a long distance telephone——

Q. Was that absolutely correct, too?

A. Yes, sir. And Prof. Hitchcock had absolute knowledge of everything that went on, and corroborated all of my findings.

By Edward Kibler: Well, I move to rule out what he says about Prof. Hitchcock's knowledge.

The Court: The motion is sustained.

A. By noting the gas that we received at the Columbus end, and the Johnstown end, we found that that corresponded as to what we would have gotten by computing the compressor drop.

Q. You left a certain volume of gas in the pipe?

A. Yes, sir.

Q. How long did you leave it there?

A. I don't remember the exact time.

211 Q. What diminution of pressure was there?

A. I haven't the record here.

Q. Is that the only experiment that you made as to the leakage proposition?

A. That is the only information that was published.

Q. Is that the only demonstration that was made?

A. No, sir. In Kansas——

Q. Is that confidential?

A. Part of it is.

Q. Was it the same kind of an experiment?

A. It was similar.

Q. You were informed that the line had no pipe connection, and you closed the ends?

A. We took the leakage in the other test and used that as a basis in the second test.

Q. And that is all the experience that you had as to leakage? Is that the source of information that led you to testify on that subject?

A. Yes, sir; I have a knowledge of——

Q. And that is the only knowledge that you have on the subject?

A. I have a knowledge of the laws of leakage.

Q. I mean, from practical demonstration of the lines.

A. They have been demonstrated time and again.

Q. It doesn't matter whether the line is well constru-ted or not?

A. Yes, sir, it makes all the difference in the world.

Q. Did you see these lines put down?

A. No, sir.

Q. Do you know with how much skill they were put down?

A. We had the line uncovered at various places.
Q. Did you find any leaks?
A. We found the leaks which we would expect to find in any normal transmission line.
Q. Did you find any?
A. Certainly.
212 Q. How many?
A. I don't recall the number.
Q. Do you know the acreage that the Logan Company has?
A. No, sir.
Q. Where is the plat that was first exhibited here in reference to the rock pressure?
A. It is Exhibit A.

By Edward Kibler: Mr. Bailiff, will you put that on the blackboard?
(The Bailiff hangs the exhibit above mentioned on the blackboard.)

Q. What is the source of information that you have drawn on in making that chart?
A. The records of the different companies.
Q. What companies?
A. The Ohio Fuel Supply Company; the Columbus Natural Gas & Fuel Company, and the Logan Company.
Q. What are the two lines there?
A. The one to the left is the Sugar Grove field, and the other is the Homer field—the depreciation.
Q. What is the map on the right hand side?
A. The location of the different pools comprising that territory.
Q. The Sugar Grove and the Homer fields?
A. Yes, sir.
Q. They connect in that way, do they?
A. That indicates the approximate location; nobody knows whether there is an underground connection.
Q. That appears to be one continuous pool.
A. Yes, sir. And appears to extend into the Ashland pool.
Q. In 1895 was the first gas well in this territory. When was the first in the State?
A. I couldn't say.
213 Q. Where was the first natural gas, wild-cat territory for commercial purposes?
A. The Findlay field.
Q. Do you know when that was?
A. No, sir.
Q. This chart is made up from records kept between 1895 and 1911.
A. Yes, sir.
Q. What number of wells was resorted to to get those figures in the different years?
A. The Homer field, in 1902, we had records of 23 wells; in 1903, 75; in 1904 we have records of 112 wells; in 1905, 163 wells;

in 1906, 209 wells; in 1907, we have no records; in 1908, 326; no record in 1909; in 1910, 369; in 1911, 362.

Q. Take the other territory.

A. In 1896, there were 2 well records; in 1897, there were 3; in 1898, no records; in 1899, 5; 15 in 1900; 34 in 1901; 64 in 1902; 62 in 1903; 87 in 1904; 94 in 1905; 88 in 1906; 92 in 1907; 96 in 1908; 72 in 1909; 77 in 1910, and 89 in 1911.

Q. Between 1904 and 1905 there wasn't any diminution of rock pressure in the Sugar Grove field, was there?

A. There was practically none.

Q. And from 1904 to 1911, the variation is less than 50 pounds.

A. Yes, sir. About 35 would be correct.

Q. Have you any way to account for that?

A. The output became so low that the draft on the wells was very much less than in the earlier stages.

Q. Then for 7 or 8 years it was about the same?

A. Yes, sir, practically constant.

Q. Where do you test the pressure?

A. At the well.

Q. How do you do it?

A. By screwing a cap on the top or a plug in the gate.

Q. What sort of a gauge is used?

A. An ordinary spring gauge.

214 Q. Is this the average of all the wells?

A. The number of well records available. Some of the records were misplaced. The average of all the records available.

Q. You took all of the records available?

A. Yes, sir. At the end of 1911, we had 362 individual records, and they gave an average of 200 pounds; some had four or five hundred rock pressure, but taking the average gave 200.

Q. And it was the average of all the wells, the records of which were available?

A. The average of which the records were available.

Q. Were these tests made at any particular time?

A. Usually in the spring.

Q. It would be higher at other times of the *yaer*?

A. Normally it would be, yes, sir.

Q. How much is the difference?

A. No general statement could be made that would apply.

Q. What do they ordinarily show?

A. No general statement could be made. One well may be worked twice as hard as another.

Q. Would that make any difference?

A. Yes, sir; the harder you work it, the lower the rock pressure will become.

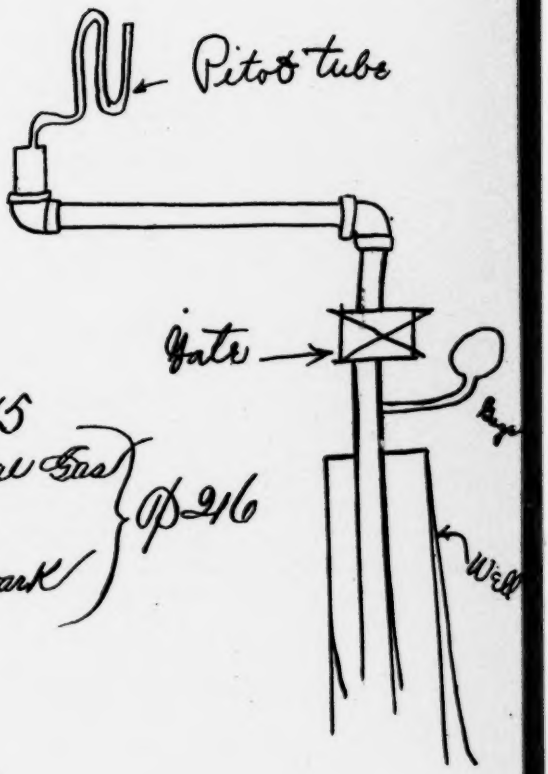
Q. If you rest it, the pressure increases, doesn't it?

A. That is the rule, but there are exceptions.

Q. Do you know a well that has gone back to its original pressure?

A. I have heard of them.

Q. Where?




No 615
Newark Natural Gas & Co. v. City of Newark } p. 216

A. In these fields. Every normal field will develop freak wells.
Q. Is it customary to work the wells 24 hours a day in this field?
215 A. It is customary when the company is forced to do it. They would prefer not to do it. But when a shortage comes on, it is necessary, generally.
Q. Do you know anything about the capacity of the wells in the Utica and Homer field-?
A. The G. Mertz No. 1——
Q. (Interrupting.) I don't want you to read the individual wells. Can you give the number and the output?
A. The total output of the group, in the Sugar Grove field, six million; in round numbers.
Q. When was that?
A. About two years ago.
Q. Have you the test since that?
A. No, sir, I haven't.
Q. How many wells?
A. Thirty-five, if I have counted correctly.
Q. What field?
A. The Sugar Grove. The volume was six million, at 50 pounds head.
Q. And the other field?
A. The Homer field, twenty-nine million.
Q. How many wells?
A. About 120 or 125.
Q. Twenty-nine million?
A. Yes, sir. That is the capacity at the wells.
Q. That is, per day?
A. Twenty-four hours.
Q. How did you ascertain that?
A. By a Pitot tube.
Q. How was it taken?
A. By the use of the blackboard, I can explain that. It would be impossible to explain it without the use of the board.
Q. Well, you may do that, if you wish to.

(The witness draws on blackboard a diagram, of which the following is a true copy:) (See next page:)

(Here follows diagram marked page 216.)

217 A. These two lines represent the gas well; this is the pipe coming to the top of the well; this is the guage; and a Pitot tube at this point. (Indicating on said diagram.) The method is to close the gate on top of the well and then read the rock pressure from the pressure gauge below the gate. Then, to get the open flow, the gate is opened wide and the gas is allowed to pass directly into the atmosphere, the velocity head of the gas being determined by means of a Pitot tube held over the gas opening. In order to determine the capacity of the well at 50 pounds head, the gate was partially closed so as to retard the flow of gas, and maintain 50 pounds pressure in the pipe. The velocity head of the gas as it flowed through the pipe was then determined by means of the Pitot tube held over the opening. That arrangement was applied to every one of the wells.

Q. Do you know of any test as to the Logan Company—what their production of gas is?

A. I have no knowledge of what they did recently.

Q. You say that you were never connected with the operation of a Gas Company?

A. That is true.

Q. Where do you derive any knowledge from experience in reference to the care that wells of moderate gas production are required to receive as compared with wells of maximum production?

A. By studying the conditions.

Q. Where did you do that?

A. I am doing that now for the Ohio Fuel Supply Company. I am making a comparison between the operating cost of certain groups of wells under one set of conditions, and under different conditions.

Q. When did you commence that work?

A. Six or seven months ago.

218 Q. Did you go into the field?

A. A part of it, and a large part from the records. The experimental work is carried on under my directions.

Q. And you are not present?

A. Largely not.

Q. Do you know the capacity of the largest well in the Utica-Homer territory?

A. I don't know the largest.

Q. Do you know the capacity of the largest well in that territory when you examined it?

A. Yes, sir, I can give that to you. The D. Irwin No. 2, 1,195,000 feet in 24 hours. 125 wells.

Q. Do you know how many million cubic feet wells there were in the 125 wells?

A. Two.

Q. Two that reached the million mark?

A. Yes, sir, two.

Q. And how many over three-quarters of a million?

A. Two wells.

Q. Two that reached one million and two that reached three-quarters of a million?
A. Yes, sir.
Q. How about half a million?
A. Fifteen beyond one-half million.
Q. And that is out of 125 wells?
A. I will count them for you.
(The witness counts.)
A. 112.
Q. Those are the wells of the Columbus Natural Gas & Fuel Company?
A. Yes, sir.
Q. That plat (indicating plat) you say was made by you?
A. Yes, sir.
Q. From what sources of information?
219 A. We got the location from the engineering department of the Logan Company; and the same is true of the other two companies.
Q. The Ohio Fuel Supply Company and the Columbus Gas & Fuel Company?
A. Yes, sir.
Q. That is the Sugar Grove field?
A. Yes, sir.
Q. Is this (indicating on said plat) the Reservoir?
A. Yes, sir.
Q. And Licking County is immediately North?
A. Yes, sir.
Q. Have you any way to distinguish these colors?
A. The yellow, the Ohio Fuel Supply Company, the green, the Columbus Gas & Fuel Company, and the black the Logan.
Q. What do the different shades mean?
A. It was made to show the wells that were dry, and those that had produced and had gone dry.
Q. The green was what Company?
A. The Columbus Gas & Fuel Company; the red and black the Logan Company.
Q. Do you know how many are Logan wells and how many are wells of the other companies?
A. I didn't count them.
Q. How many are active wells?
A. That map was made for another purpose; it indicated those which came in dry, and those which were producing.
Q. You cannot tell which are dry and which are active wells?
A. No, sir, I couldn't tell from memory now.
Q. When was that map made?
A. Several months ago.
Q. What was the date of the report that you used to compile the map from?
A. Last summer; about the first of August or September.
220 Q. Now, where is the other chart?
A. That is this one. (Indicating chart.)

Q. You have represented on that map the different companies' wells?

A. Yes, sir, the same as the other.

Q. It is the same as the other as to the representation of colors?

A. Yes, sir.

Q. The Logan Company is in red and black?

A. Yes, sir.

Q. The Logan Company has a number of wells in the vicinity of Newark. And some in the corporate limits—two wells owned by the Logan Company.

A. I couldn't tell about that.

Q. Well, they are black and red.

A. Well, that will show.

Q. And in Madison Township, the Logan Company has two wells, just east of the city of Newark. Is that right?

A. Well, I couldn't state that now as a matter of memory.

Q. Isn't that shown on the map?

A. Yes, sir.

Q. And northeast of Newark Township, the map shows that the Logan Company has one well?

A. Yes, sir.

Q. And immediately north of Newark Township, the map shows that the Logan Company has five wells?

A. Yes, sir.

Q. And in Licking Township, immediately south of Newark Township, the map shows that there are 27 or 28 wells owned by the Logan Company. In the Township immediately south of Newark Township?

A. The chart will speak for itself.

Q. Well, if they are on the chart, that is correct, is it?

A. It is supposed to be correct. It was compiled for that purpose.

221 Q. In Granville Township, the map shows that the Logan Company has eight wells. Is that right?

A. I don't know any more than what the chart shows.

Q. You are not afraid to count them, are you?

A. The record speaks for itself.

Q. And this map shows that in Union Township, just southwest of Newark, the Logan Company has 12 wells. Is that right?

A. I don't know; the record speaks for itself.

Q. Well, that was made under your directions? You are not going back on your map, are you?

A. No, sir.

Q. Do you know how many wells, Mr. Wyer, the Columbus Gas & Fuel Company had in operation, all told, when you made that investigation?

A. If I have counted them correctly, there would be 147.

Q. The Logan Company had, recently, as many as 179 wells in Licking County?

A. I have no record as to the number they might have had at one time.

Q. Do you know how many wells are indicated on that map as Logan wells?

A. I didn't count them.

Q. I wish you would count them and tell me how many there are as shown by that map, in black and red?

A. It will take a long time.

Q. I would like to know. I think it is very material.

By Mr. Fitzgibbon: We have a Logan man whom we expect to introduce as a witnes, and he will testify about that.

By Edward Kibler: This witness, I think, is as good as any other.

A. I couldn't count them inside of 25 minutes.

222 The Court: He says it will take him 25 minutes. The map itself will show.

By Edward Kibler: I think some one should do that. That map has not been introduced in evidence.

By Mr. Montgomery: It is the intention to introduce all of those in evidence.

By Judge Douglass: We offer them now.

(The papers above offered in evidence were here marked by the stenographer B, C, D, E, and F, respectively. True copies of said papers are hereto attached marked, as aforesaid, B, C, D, E, and F, and made parts hereof.)

By Edward Kibler: What I want the witness to do is to report the number of Logan Company gas wells in each of these fields, as shown by the maps which have been introduced in evidence.

The Court: Do you desire that done now?

By Edward Kibler: No, sir, he can do that after while.

Q. You say that you prepared this map marked D?

A. It was done under my direction.

Q. What did you have to do with preparing it?

A. We had an outline-print of the State of Ohio, without any lines shown; one print like that was sent to the engineering department of each of the different Gas Companies which were interested, and they indicated thereon the location of their particular line.

223 Q. Which companies did you send that to?

A. To every company having a pipe line in the State of Ohio.

Q. That is supposed to cover all of the pipe lines in the State, is it?

A. Yes, sir.

Q. And they located their individual line?

A. Yes, sir.

Q. And it came back to you?

A. Yes, sir, and was assembled under my direction on one map.

Q. Is there anything to indicate the ownership of these different lines?

A. No, sir, there is nothing on there to indicate that.

Q. Well, isn't there? Some of them are indicated, are they not?

A. In general; this is the East Ohio group here (indicating on said map).

Q. The West Virginia gas comes through independent lines?

A. Yes, sir, the lines are entirely separate from the Ohio lines.

Q. Where is the Logan line which is in process of construction, which comes from the West Virginia territory?

A. I couldn't state the exact geographical location.

Q. The Ohio Fuel Supply Company has an 18-inch main line into West Virginia.

A. Yes, sir.

Q. And a 16-inch line—is that theirs just north of that?

A. I think not.

Q. You don't know whose line that 16-inch line is?

A. I cannot identify it.

Q. The lines running towards Cleveland do not seem to be marked as to the size. Do you know the size?

A. Some of them are 24-inch. I couldn't answer from memory.

224 Q. There is a line from Columbus to Toledo shown on the map.

A. It runs outside of Columbus, but not through Columbus.

Q. From the Sugar Grove field.

A. Yes, sir.

Q. Do you know who owns that line?

A. The Northwestern Gas Company.

Q. Is that a Natural Gas producing company?

A. No, sir, it is just a pipe line company.

Q. Do you know how many of those lines are owned by pipe line companies?

A. I cannot answer definitely.

Q. That is one of them?

A. Yes, sir.

Q. It simply owns the pipe line?

A. Yes, sir, and the compressor stations.

Q. It is not a producing company?

A. No, sir.

Q. Is the Logan Company a developing company?

A. It is a producing, transmitting and distributing company.

Q. It is engaged in all three of those gas activities?

A. Yes, sir, it is.

Q. It sells gas which it produces, but does not distribute.

A. Yes, sir.

Q. It transports gas which it neither produces nor distributes?

A. Yes, sir.

Q. And it transports gas which it both produces and distributes?

A. Yes, sir.

By Edward Kibler: That is all.

The Court: We will have a few minutes' intermission.

(Here the court took a recess.)

225 Mr. WYER:

Redirect examination.

Examined by Judge S. M. Douglass:

Q. Do you know where Prof. Hitchcock is now?
A. He is somewhere in Tennessee.
Q. The examinations of the Sugar Grove and Homer fields, which you have described to Mr. Kibler—can you fix the date when they were made? That is, approximately.

By Edward Kibler: He said: Between March and August; three years ago this year.

Q. Mr. Wyer, I will ask you whether or not it is practicable to bring the gas from the Ashland field to Newark or this vicinity.

By Edward Kibler: I object; he is not qualified to answer that question.
By Mr. Montgomery: This is in view of your cross examination as to that particular field.

Q. Do you know the transmission system of any of these companies which are operating in these fields? Do you understand the system?
A. I am more familiar with the Ohio Fuel Supply Company's system than with the Logan Company, because I have done more work on that system.
Q. As to the Ohio Fuel Supply Company, what is the fact?
A. It can sell gas from the Ashland field anywhere on its system.
Q. Do you know the piping system of the Ashland field?
A. I am familiar in a general way with a part of it.
226 Q. Do you know what towns are supplied by the Ashland field? North, or south?
A. A large number of the towns that are supplied by the Logan Company north, get their supply from the Ashland field. The Medina Gas Company has a line running westward. The Ohio Fuel Supply Company has an intake line and takes gas by means of a connection, and can force that gas into practically every part of the system, if it so sees fit.
Q. The territory north of Ashland—does that take all the gas from the Ashland field to supply it, do you know?
A. I couldn't answer as to that; I have no information about that.
Q. Do you know the price that the Ohio Fuel Supply Company furnishes gas, at wholesale?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Judge Douglass: Note an exception.

Q. Taking a period of five years, beginning March 6, 1911, and ending March 6, 1916, from your knowledge of the gas business, and its production, transmission and distribution, what would you say

would be a fair and reasonable rate or price for natural gas furnished to consumers at Newark, Ohio?

By Edward Kibler: I object. That is the ultimate fact to be determined in this case.

227 The Court: We will receive the evidence at this time.

By Edward Kibler: Note an exception.

A. Considering all the factors that would have to be taken into consideration, the retail price ought to be not less than thirty cents net.

By Edward Kibler: We move to rule out the answer.

The Court: The motion is overruled at present.

By Edward Kibler: Note an exception.

Q. What would you say right now would be a fair and reasonable price or rate to be charged for natural gas to the citizens of Newark, Ohio?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: We wish an exception.

A. Do you mean with no time limitation?

Q. If you were going to settle that question this minute.

A. There would be very little difference between the price today and if limited to five years.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

228 By Edward Kibler: We wish an exception.

By Judge Douglass: I believe that is all.

By Edward Kibler: Don't forget to make that computation for me before you go. I do not want to excuse you until that is done.

A. All right.

WM. D. STOUGHTON, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. What is your name, please?

A. My name is Wm. D. Stoughton.

Q. Where do you live, Mr. Stoughton?

A. I live at Centerburg, Route R. D. 3.

Q. What business are you engaged in?

A. I am in the gas business.

Q. With what company are you connected?

A. With the Columbus Gas and Fuel Company.

Q. What position do you hold in the Columbus Gas and Fuel Company?

A. I am general superintendent of the north field.

Q. For how long have you been general superintendent?
A. For four years from the first of this month.
Q. By the north field, what field do you mean?
A. The Licking and Knox field.
229 Q. That is the Homer field?
A. Yes, sir.
Q. How many wells has your company in that field?
A. About 133 producing wells at the present time.
Q. What is the average depth of the wells in that field?
A. Close to 2,400 or 2,500 feet.
Q. What is the cost of drilling a well in the north field?
A. That varies according to the depth, and what part of the field it is in.
Q. Well, I mean the average cost.
A. Do you mean including the pipes and everything?
Q. Yes, sir, I mean a completed well.
A. About $3,500 to $4,000.
Q. How many wells belonging to your company were abandoned in the year 1911?
A. I couldn't state exactly unless I had my records, but, from the best of my recollection, I would say about twenty.
Q. How many were abandoned last year?
A. About the same amount. They abandoned generally from 15 to 25 wells a year, since I have had anything to do with them.
Q. Have you any data showing the rock pressure of the wells belonging to your company in the years 1910, 1911 and 1912?
A. Yes, sir, I have.
Q. Will you refer to it?

(Witness gets memoranda.)

By Mr. Roderic Jones: I want an objection entered to all of this, and a motion to rule out the answers and so forth, and an exception.

Q. Go ahead, Mr. Stoughton.
A. Here is a series of eight wells drilled in Eden Township.
230 Q. When was the Eden field opened up?
A. Our Company drilled the first well in Eden Township in the summer of 1910.
Q. In 1910?
A. Yes, sir.
Q. Do you know at what time other companies began drilling in Eden Township?
A. I think the Logan Company and the Ohio Fuel Company began the year before that.
Q. The year before that?
A. Yes, sir.
Q. When did they begin drilling in the Homer field? About what time?
A. I don't remember just the date.
Q. Well, if you don't know that, we will pass to something else. Are you able to give the number of companies operating in the Homer field?

A. The Ohio Fuel Supply Company, the Logan Natural Gas and Fuel Company, the Columbus Gas and Fuel Company, the Everett Company and the Upham Gas and Fuel Company. And there was, at one time, a Wright and Levering Company. And the Clark Company, the Mohican Gas and Oil Company, and the Utica Gas and Oil Company.

Q. Do you know how many wells these companies have in that field?

A. No, sir, I couldn't tell that.

Q. I wish you would give the rock pressure of those eight wells in Eden Township. How did you select them?

A. They were all drilled in the same year. They were drilled in 1910. The average rock pressure was 581 pounds. The total open flow, at the time they were drilled in, was 12,278,300 cubic feet.

By Edward Kibler: How much?

231 A. 12,278,300. We take the open flow and the rock pressure each year.

Q. When?

A. Generally in September. In 1911, the same eight wells—the average rock pressure was 269 pounds; total open flow, 1,509,798. In 1912, the average rock pressure was 203. The total open flow was 652,997. And I have a record of five wells drilled in Washington Township, Licking County, in 1909. The average rock pressure was 637 pounds; open flow, 4,596,368 cubic feet. In 1910, the average rock pressure was 386; total open flow, 1,590,822 cubic feet. In 1911, the same five wells, the average rock pressure was 224 pounds; total open flow, 589,730. In 1912, the same five wells, the average rock pressure was 202; total open flow, 310,370. The Van Weye, No. 2, drilled in 1911, initial rock pressure 620; open flow, 1,054,000. In 1912, the rock pressure was 300; open flow, 70,260. I have what are called the Utica Gas Company's wells in Washington Township. We bought the gas from those wells.

Q. Did you take those measurements?

A. Yes, sir. The Bernard well, No. 1, drilled in 1910, the initial rock pressure was 600; initial open flow, 2,000,000; the same well in 1911—I didn't get the rock pressure—the open flow was 110,880. In 1912, the rock pressure was 125; the open flow 65,396. Hobbs, No. 1, drilled in 1910, initial rock pressure 600, initial open flow, 1,500,000. The same well in 1911—I didn't get the rock pressure that year; but the open flow was 203,816. The same well in 1912, rock pressure 125; open flow, 85,940 cubic feet. J. S. Graham.

232 No. 1, in McKean Township, the west edge; we were buying the gas; this well was turned in January 17, 1911; initial open flow, 1,256,064; initial rock pressure, 600; February 13, 1911, the open flow was 807,200; rock pressure, 550. March 17, 1911, the open flow was 578,244; I didn't get the rock pressure at that time. In September, 1912, the open flow was 186,256; the rock pressure was 390.

Q. What is the comparative cost of keeping wells in operation now, as compared with the last two or three years?

A. The average cost two years ago was about $6.00 per well, per

month, for well-blowers. The cost has increased now to about $9.00 per well, per month.

Q. What do you attribute that increase to?

A. As the pressure goes down, it is harder to keep the wells free of water, and you have to put on more men to bail them out and take care of them.

Q. I wish you would state to the Court what the annual depreciation of your wells amount- to?

A. It amounts to about 31% per year.

By Mr. Fitzgibbon: That is all.

By Edward Kibler: We move to rule out this evidence as not being responsive to the issues in the case.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

233 WM. D. STOUGHTON.

Cross-examination.

Examined by Edward Kibler:

Q. Mr. Stoughton, you have 133 producing wells?

A. Yes, sir, about that.

Q. That is, the Columbus Gas and Fuel Company?

A. Yes, sir.

Q. How many companies did you mention as being in that field up there—about how many were there? About a dozen?

A. I didn't keep count of them as I went along.

B. J. R. Fitzgibbon: I would like to ask him a question:

Q. Do you know anything about the Sugar Grove field?

A. No, sir, I didn't have anything to do with that.

By Edward Kibler:

Q. You have been a long time connected with that field?

A. I blowed wells for two years, and I have been general superintendent for four years.

Q. How old is that field?

A. Two or three years before I went to blowing wells.

Q. That would be about eight years ago?

A. Yes, sir.

Q. How many wells does your Company put down in a year?

A. It varies. We have drilled in this field from 25 to 35 a year.

Q. A year?

A. Yes, sir.

Q. How much acreage have you in that field?

A. That is something that I don't have anything to do with.

234 Q. They don't let you in on that, do they?

A. I could find out, of course, but it is not in my line.

Q. The 133 wells are in the Homer-Utica field?

A. Yes, sir.

Q. Does that mean Licking County?
A. Yes, sir. That means Licking County.
Q. Do you know how many wells the Logan People have in that field?
A. No, sir.
Q. Do you drill your own wells?
A. We hire them drilled, by contract.
Q. You don't pay the men wages?
A. No, sir.
Q. But you hire it done by contract?
A. Yes, sir.
Q. Do you make the contracts?
A. No, sir, that is done at Columbus.
Q. And the average depth is about 2400 or 2500 feet?
A. Yes, sir.
Q. And the average cost is from $3,500 to $4,000?
A. Yes, sir.
Q. That is for a completed well?
A. That is tubed.
Q. And ready to turn into the line?
A. Yes, sir.
Q. You have how many pipe lines in that territory, or mains, I mean?
A. We have two eight-inch lines from the pumping station at Johnstown to South of Utica; and a continuation of one of those about eight miles east; and a ten-inch line running south towards Granville, which ends in a six-inch line; and we have smaller lines leading in.
Q. Have you any wells in the Ashland field?
A. No, sir, not now. We were up there, but we gave it up.
235 Q. You disposed of your wells, did you?
A. We didn't find any.
Q. You don't give the record of any wells put down before 1910.
A. In 1909 is when I took charge.
Q. You didn't give any reading of the rock pressure before 1910.
A. In 1909, I have here. Five wells drilled in Washington Township in 1909. Average rock pressure 637 pounds. Total open flow, 4,596,368.
Q. Those were the five wells in Washington Township?
A. Yes, sir.
Q. I noticed that the drop in the rock pressure in all the wells comes early. And it maintains the pressure afterwards to some extent.
A. It doesn't drop so fast after it gets to 200 or 150.
Q. In those five wells, your initial pressure was 637 pounds. In 1909.
A. Yes, sir.
Q. And it drops nearly 50% the next year; and drops to 324 and 202?
A. Yes, sir.

Q. The Van Weye—in that well there was almost a 50% drop in the rock pressure——

A. Yes, sir.

Q. Between 1911 and 1912?

A. Yes, sir.

Q. In the J. S. Graham, No. 1, in about a year, you have almost 50% of a drop?

A. Yes, sir.

Q. You are using gas from these wells now?

A. Yes, sir.

Q. Do you know how many million feet you get a day—in 24 hours from this territory up there—about how much?

A. I couldn't state exactly. I could approximately.

Q. When do your figures refer to as the time?

A. The coldest day we had this year, I think was the first
236 of this month. We had an invoice which showed about 28,000,000 in this field. I called up Mr. Baker at the station, and asked him how we were getting along——

Q. (Interrupting.) Well, I don't want what you said to him.

A. I would have to give you the report that he gave to me.

Q. You haven't it first hand?

A. No, sir. Only their records. That was the coldest day we had this winter?

Q. The coldest day we had this winter?

A. Yes sir.

Q. Do you know what your maximum supply is?

A. No, sir, I haven't any record of that.

Q. Where do you send your gas?

A. Mostly to Columbus.

Q. To any other part of the State?

A. No, sir.

Q. You don't furnish any other county seats with gas?

A. No, sir.

Q. It mostly goes over there?

A. Yes, sir.

Q. Do you sell any gas to any distributing companies?

A. No, sir.

Q. Do you buy any gas?

A. Yes, sir, from the Utica people; and from Graham and Pearsoll; Graham No. 1.

Q. Is that a company that produces gas, or just the owners of an individual well?

A. They have about nine or ten wells. They are in partnership.

Q. And do you know what you pay them for the gas?

A. No, sir. I didn't make the contract.

Q. Do you know what it is?

A. No, sir.

Q. Is that J. S. Graham who used to be county commissioner here?

A. Yes, sir.

237 Q. And you have now a contract with them?

A. I suppose the company has, in Columbus.

Q. And your company now has a contract with the Utica Company?

A. No, sir, we have quit taking their gas.

Q. How long since?

A. In October.

Q. Last year?

A. Yes, sir. That was the Utica Gas, Oil and Mining Company.

Q. The Utica Gas, Oil and Mining Company?

A. Yes, sir.

Q. Who are the officers?

A. I think Fred Sperry is the president.

Q. Those are the only companies that you buy from?

A. Yes, sir, to my knowledge, in this field.

Q. When was it that you said that the cost of keeping a well in operation was about six dollars per month?

A. In 1909 and in 1910.

Q. You are constantly drilling new wells, are you?

A. Yes, sir.

Q. What is the life of the oldest well that you know of belonging to your company which you have used?

A. That is a pretty difficult question for me to answer unless I had the records. This company drilled a good deal before I took charge.

Q. There are wells in active use now that were in use when you first began with the company?

A. Yes, sir. The oldest one that I know of is the Holler, No. 1, in McKean Township.

Q. How old is that well, to your knowledge?

A. I think it is about seven years old.

238 Q. Do you know of any wells which have been active and used for over that length of time?

A. Not to my knowledge.

Q. You don't know of any well that has been producing longer than seven years?

A. Not in this field, no, sir.

Q. Well, in this field, I mean?

A. No, sir, not that I can remember of now. I don't remember any.

Q. When you say that you abandon about twenty wells a year, what do you mean?

A. I mean where we pull the pipe.

Q. Where you disconnect them?

A. Yes, sir, and pull the pipe out.

Q. And some are old and some new ones?

A. Yes, sir.

Q. Sometimes the flow is more constant, and sometimes it ceases, or gets below the commercial point?

A. Yes, sir.

Q. Did you ever know any wells that showed an increase of the rock pressure?

A. Yes, sir.

Q. Was it a freak?

A. That is what the gas men told me. We drilled in the Meecham well, No. 1. It was about 250 pounds. I took charge of the field about that time, and in about two months' time the blower says: That well is gaining in pressure and I couldn't believe it. I couldn't believe it because it was pulled all the time, day and night. It was on the line all the time. I got a gauge and shut it in for twenty-four hours, and it showed 400 pounds.

Q. Did you suspicion that there was anything wrong with your instrument?

A. Well, I had a new gauge then.

Q. Did you ever try that well again?

A. Yes, sir.

239 Q. How long did it maintain that 400 pounds?

A. I couldn't tell that. It finally fell down to about 100 pounds today.

Q. When did it get below its initial pressure? How long after you took the first measurement?

A. I couldn't tell you that without my records.

Q. Weeks, or months, or how long?

A. I would judge that it got back to its initial pressure in about six months.

Q. How long did it live?

A. It is alive now. It is just alive and that is about all.

Q. And that is about a seven year well?

A. No, sir, about five years old.

Q. It is still connected with their main, is it?

A. No, sir, not with the Columbus main. It is connected with a little plant where I live.

Q. Whenever you drill a well you put it into some man's charge?

A. Yes, sir.

Q. And he visits it every day?

A. No sir, not every day. Unless it is necessary. About every other day.

Q. Does a man have a cluster of wells to look after?

A. Yes, sir.

Q. And you used to pay about six dollars a well?

A. The average cost.

Q. Doesn't it depend upon the distance that a man has to go?

A. No, sir. Upon the condition of the well.

Q. About how many wells does a man have in his charge? It depends upon the distance, doesn't it?

A. I *have* two men last winter on thirty-six wells; and this winter I had three men on the same number of wells.

240 Q. Were these wells close together?

A. Fairly so.

Q. Well, I don't want your exceptional cases. But generally?

A. We bunch them up as much as possible.

Q. You say that the men's wages have increased for looking after the wells to about nine dollars a well.

A. Sometimes a well will go dead, and we have to bail the water out.

Q. And you count that as part of the expense?

A. Yes, sir.

Q. Is the using of power to bail the chief reason why you are paying more?

A. On account of the water.

Q. The men are getting the same wages, practically?

A. Yes, sir.

Q. How do you pay them—by the well?

A. No, sir, by the month.

Q. What do you pay the men on an average per well, per month, as wages?

A. I didn't figure that. The bailing is all put in together.

Q. Is this the average of the 133 wells?

A. Yes, sir.

Q. You have taken the general cost of the number of wells when you first went in there, and now?

A. Yes, sir.

Q. And you find that the expense is about three dollars per month more now per well than it was then?

A. Yes, sir.

Q. And that includes all that is necessary to be done to the well?

A. Yes, sir. Unless it needs to be revived.

Q. Is that on account of the water?

A. Yes, sir, on account of the water.

Q. I understood that you did include the cost of pumping
241 the water by machinery.

A. Sometimes we have to put up a rig.

Q. You haven't counted that expense in, have you?

A. No, sir. That is not counted in.

Q. Well, that is the exception, rather than the rule, isn't it?

A. Yes, sir.

Q. Sometimes you have to put up a rig, but that is the exception.

A. Sometimes we have to do that.

Q. Do you mean that a well only lasts about three years?

A No, sir.

Q. Well, how do you figure 31% depreciation?

A. Say that our invoice would show 90,000,000, in September; and the next April invoice would show only 60,000,000.

Q. That depends upon the appraisement that you have put on the property.

A. No, sir. The open flow.

Q. You make a test of the open flow.

A. Yes, sir, take a Pitot gauge and find what the open flow is.

Q. Have you the 133 wells under your jurisdiction?

A. Yes, sir.

Q. And you get the amount of pressure, or the open flow record?

A. Yes, sir.

Q. Have you your records here, showing how you figure the 31%?
A. I have them home.
Q. We would like to know how you arrive at that conclusion.
A. From the depreciation. The same wells that invoiced say 90,000,000 in September, we find that the next spring the same wells only invoiced about 60,000,000.
Q. You have taken the period of the hardest pull.
A. It averages that right through.
242 Q. I would like to see your record.
A. That is the record of the engineer.
Q. Who makes it?
A. I get the data and he compiles it.
Q. You get the measurement of the open pressure of the different wells?
A. Yes, sir.
Q. You get your drillers to do that, or do you do that personally?
A. I did it personally myself last fall.
Q. What was the total open flow of all the wells?
A. I think 28,000,000.
Q. When?
A. In September and the 1st of October.
Q. What was the rock pressure?
A. The average rock pressure for the field I think was a little over 200 pounds.
Q. Have you that record that you made in September last year?
A. I have it at home.
Q. Have you the record that you made the year before?
A. I didn't make the record. It was compiled by the engineer, and the data was furnished by me.
Q. Is the engineer here?
A. No, sir, he is in Columbus.
Q. When did you make your inventory before last September?
A. A year before.
Q. What was the open flow then?
A. I don't know.
Q. How can you say that there was a depreciation of 31% unless you know what the figures were?
A. I figured it at home.
Q. You come here without being able to show us the data upon which you made the figures.
A. I could show you the data if I had it here.
243 By Edward Kibler: Well, I move to rule that testimony out.
The Court: Do you desire the data?
By Edward Kibler: If the court is going to let it in, I desire the witness to produce the data.
The Court: Bring the data with you.
By Edward Kibler: When you come back tomorrow, bring the figures with you showing the inventory for the two years, and any other years that you have the figures for.
A. I don't know that I can come back tomorrow, Mr. Kibler.

By J. R. Fitzgibbon: Can you come back Thursday?
A. Yes, sir.
By J. R. Fitzgibbon: Well, that will be all right.
By Edward Kibler: Yes. That is all.

WM. D. STOUGHTON.

Redirect examination.

Examined by J. R. Fitzgibbon:

Q. What is the average life of the wells drilled in the north field at this time?
A. I don't know hardly how to answer that question. I didn't figure that.
244 Q. Do you know whether any wells drilled in 1910 or in 1911 in that field will, in your judgment, last as long as seven years?
A. No, sir, I don't.
Q. What causes the water to gather in the wells?
A. Some claim that the water comes from rock, and some claim that it comes above the packer.
Q. Would the water gather in a well with a high rock pressure as quickly and as easily as in a well with a low rock pressure?
A. A well might have a high rock, and very little flow. In a low flow well, it is more apt to get around the packer.
Q. You mean a low open flow?
A. Yes, sir, a low rock.
Q. Then the rock pressure hasn't as much to do with that as the flow of the well?
A. No, sir.

By Mr. Jones: I object.
The Court: That is argumentative.
By the Fitzgibbon: Well, that is all.

Judge LEVERING, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

Q. Your business is that of practicing law?
A. Yes, sir.
Q. Were you ever engaged in the natural gas business?
A. Yes, sir, I was, for a number of years.
245 Q. State to the court about the extent and nature of your connection with the natural gas business.
A. It commenced in 1902 with the Knox County Gas Company. In 1903, with the Homer Gas Company; and I was also connected with the Waight and Levering property, which consisted of gas property in Richland County. The other two properties were in Knox and Licking Counties.
Q. How long did that extend from 1902?

A. My interest in the Knox County Company extended from 1902 until April, 1910; with the Homer Company from 1903, and we disposed of that property the 1st of January, 1912. The Waight and Levering property in 1905, and disposed of it in May, 1912.

Q. What acreage was covered?

A. The Knox County property was composed of about three or four thousand acres in Knox County; the Homer Natural Gas Company of about five thousand acres in Knox and Licking Counties. In Richland County, the acreage was very large. I think over ten thousand acres.

Q. About how many wells did all these properties cover?

A. Probably 125.

Q. Are you still engaged in the gas business?

A. No, sir, not at present.

Q. When did it cease?

A. I sold the last in May, 1912.

Q. Have you a general knowledge of the Knox-Licking field?

A. I was general manager of the Homer Natural Gas property. There were something like 60 wells in Knox and Licking Counties,
246 extending from the extreme east to the extreme west part of that field; in Bennington and Burlington Townships; in Miller, Millford, Clinton, Morgan, Pleasant, and Clay Townships in Knox County.

Q. Did that continue for some years?

A. Yes, sir. The work was commenced in 1903, and was sold in January, 1912.

Q. State whether or not your knowledge extends to the production and transmission and distribution of natural gas.

A. The Knox County Company transported and distributed all of their product; and the Waight and Levering distributed most of their product.

Q. Do you know what the init-al rock pressure of that field was?

A. Approximately 800 pounds.

Q. What is it now?

A. It varies in different localities. There was an original rock pressure of 800, and when we disposed of it, it was down to less than 100 on the west side of the field, and on the east side there was a rock pressure of a little better than 200; about 205.

Q. What does a decreased rock pressure mean in a field, as to its efficiency?

A. It affects the delivery of gas very materially. It is the pressure of gas confined in the reservoir of sandstone; the higher the pressure is, the greater the volume of gas that there is there compressed, and as it is taken out it reduces the amount that is in storage in the sandstone. The per cent of delivery is reduced as the rock pressure goes down.

Q. With a depletion from 800 to 100, from your experience, what is the per cent of decrease in production, in such an instance?

A. You have a decrease of ⅞ in your rock pressure. The
247 decrease in delivery would be at least twice the amount of depreciation because of the fact that your line pressure has not decreased in proportion to the decrease of the rock pressure.

Q. What is the effect on the cost of production, when this decrease goes down to one or two hundred pounds pressure?

A. It is increased very materially.

Q. Explain how that arises.

A. The cost and expense necessary to keep the water out of the wells. When you have a high rock pressure, sufficient to lift the water of its own force, you do not require any assistance or artificial method. As the rock pressure decreases, it reaches the point where the flow of gas will not raise the water from the well, and then you can shut the well in and open the cock, and it will blow the water out. And, later on, it won't lift the water. And the companies put in a syphon and blow it out through that. And, later, bailing devices are used, and that adds to the expense of the care of the well.

Q. About what is the average pressure carried in your main line, to carry the gas to the distributing point?

A. That varies. I think, in the earlier days of the field, the line pressure would be 200 or 250 pounds.

Q. If you have a line pressure of 200 or 250 pounds, what would you get from a well which had been reduced to 100 pounds pressure?

A. It would not deliver anything. The proportion of decrease in the production from the well, will be greater than the proportionate decrease of rock pressure.

Q. What large companies are operating in the Homer field?

248 A. The Ohio Fuel Supply Company, the Columbus Natural Gas Company, the Logan Natural Gas Company, and the Mohican Natural Gas Company.

Q. Have you any knowledge of the Sugar Grove field?

A. No, sir, I have not.

Q. I want to call your attention to the question of the risk in the natural gas business. State to the court what may be regarded as great hazards in the business as distinguished from any other kind of a business.

By Edward Kibler: I object.

Q. I will ask you what the hazards are in the natural gas business. State, in the operation of a natural gas field, what, if any, hazards, and risks there are peculiar to the business.

By Edward Kibler: I object.

The Court: It is overruled.

By Edward Kibler: Note an exception.

A. It is a hazardous business.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is sustained.

A. The paying of rentals on territory that is prospective is a feature connected with the business. The drilling of dry holes is a very large item of expense of a natural gas company. It varies in different localities, and different sections of the field, and in different fields.

249 Q. State, if you know, in the different companies in which you operated, what per cent of dry holes was obtained in your territory.

A. In the Knox and Licking field, about ten per cent. In the Richland County field, more than seventy-five per cent.

By Edward Kibler: Is that per cent of dry holes?

A. Yes, sir.

Q. Now, as to the time when you went out of the business directly, what percentage do you say there would be of abandoned wells up to that time in that field?

A. About two-thirds of the wells have been abandoned.

Q. Have you a general knowledge, Judge Levering, of the prices at which gas is sold in this section of Ohio, to consumers?

A. Well, I have some limited knowledge of it, close about here.

Q. Have you furnished gas directly to towns yourself within recent years?

A. Yes, sir. For about seven years.

Q. And those towns are situated in what county?

A. Richland County.

Q. Now, from your knowledge of the field, to which your attention has been directed, and your knowledge as well of the cost of production and transmission and distribution of natural gas, what would you say would be a fair and reasonable price, or rate, for the City of Newark, Ohio?

By Roderic Jones: I object.

By Edward Kibler: I don't think he has shown any qualifications to speak.

The Court: He may answer.

250 By Edward Kibler: Note an exception.

A. Do you mean at the present time?

Q. Yes, sir, at the present time.

A. About twenty-seven cents net, would be as low as I would want to put it.

By Edward Kibler: I move to rule out the answer.

The Court: It may stand.

By Edward Kibler: Note an exception.

Q. Now, under the same conditions which I have stated, covering a period from March 6, 1911, to March 6, 1916—covering that period of five years, what would be a fair and reasonable price or rate?

By Roderic Jones: We object.

The Court: It may go in.

By Roderic Jones: Note an exception.

A. That would be three years to run?

Q. Yes, sir, three years to run.

A. Thirty cents net.

By Roderic Jones: I move to rule out the answer.

The Court: The motion is overruled.

By Roderic Jones: Note an exception.

251 Q. In reference to the expense attending the distribution of natural gas, what is the effect of extreme cold weather on the top load that must be provided for, as affecting the expense?

A. It is a great factor in supplying gas, for the reason that you have to maintain the reserve, for the most extreme consumption, all the time.

Q. What does your experience show? A limited number of days in the winter, or not?

A. Yes, sir. As a rule, a very few days; but you have to maintain the maximum for the coldest day.

Q. State whether or not that affects your expense?

By Roderic Jones: I object.

A. It does, very largely.

Q. I will ask you this question: From your experience with this field as you have outlined it, and its depletion, what is your experience as to the future of the field?

By Roderic Jones: I object.

Q. What is your opinion upon that question?

By Roderic Jones: I object.

The Court: He may answer.

By Roderic Jones: Note an exception.

A. As to the Knox-Licking field?

Q. Yes, sir.

A. My judgment is that there will be very little gas delivered from this field in two years; some extensions and later drillings,
252 might have some effect, but the main body of the field will deliver very little gas in two years.

By Judge S. M. Douglass: That is all.

Judge LEVERING.

Cross-examination.

Examined by Roderic Jones:

Q. You are entirely out of the gas business, are you not?

A. Yes, sir, at present.

Q. You sold out all the properties that you were interested in?

A. Yes, sir, all of them.

Q. Who did you sell to?

A. The Knox County property was sold to the Upham Gas Company; the Homer Company was sold to the Logan Natural Gas Company and the Waight and Levering property, in Richland County, was sold at a dissolution sale. Mr. Whitcomb was the purchaser.

Q. He happens to be the President of the Union Gas Corporation at Pittsburgh, doesn't he?

A. I think he is, or was.

Q. He was at that time?

A. That was my understanding.

Q. Your experience in distributing was entirely in small towns in Richland County, wasn't it?

A. No, sir, we distributed gas at Mt. Vernon for a number of years.

Q. Didn't I understand you to say that you distributed in the small towns in Richland County?

A. The Waight and Levering Company—to Bellville and Butler, in Richland County.

Q. And at Mt. Vernon?

A. Yes, sir.

253 Q. Exclusively?

A. No, sir.

Q. Was there competition?

A. Yes, sir.

Q. How long did you distribute gas there?

A. We commenced the distribution in November, 1902, I believe. And the property was sold in April, 1910.

Q. To the Upham Gas Company?

A. Yes, sir.

Q. Did they cease distributing—the Upham Company?

A. No, sir. They are still distributing in Mt. Vernon.

Q. Have they competition?

A. Yes, sir.

Q. Who are they competing with?

A. With the Ohio Fuel Company. The only competitors there.

Q. The Homer Company never distributed gas?

A. No, sir.

Q. It was simply a producing company?

A. Yes, sir.

Q. How long did that last?

A. From 1903, to January 1, 1912.

Q. It was then still a producing company?

A. It was producing some.

Q. You talked about the gas business being hazardous. Do you regard the distributing end of it as hazardous?

A. If you had the assurance of a supply, it would not be so hazardous.

Q. Suppose you had the supply at a fixed price, would you regard the investment as hazardous?

A. It would depend upon the time for which you had the contract.

Q. As long as you were getting the gas it would be all right.

A. If you had the assurance of getting gas——

Q. (Interrupting.) Well, the gas itself would be better than the assurance.

A. The gas, or the assurance, would be about the same.

254 Q. And that would not involve any of the elements of hazard that you refer to—like drilling dry holes, or anything of that kind?

A. It would relieve you of that hazard.

Q. Do you know how many wells the Logan Gas Company has in the Licking-Knox field?
A. No, sir, I don't.
Q. Did you ever know?
A. No, sir, I never did.
Q. Do you know what their daily production is now?
A. No, sir, I don't.
Q. Or what it ever was?
A. No, sir.
Q. Or anything about that?
A. No, sir, I don't know nothing about their business except as I might hear it discussed.
Q. Now, Judge Levering, the Homer Gas Company property when you sold it—it was producing very little. What rock pressure did you have when you sold it?
A. The west field—it was less than one hundred pounds.
Q. Well, what was it in the east field?
A. About two hundred and five.
Q. You were delivering some gas?
A. A little.
Q. From all of the wells?
A. Some had been abandoned.
Q. But those that you still had working, you were delivering gas from, were you?
A. Yes, sir.
Q. You never knew of delivering gas against a line pressure of two hundred or two hundred and fifty pounds, with that pressure, did you?
A. I have done it.
Q. Well, that is not the ordinary condition of affairs, is it?
A. There was a time when the line pressure was higher than two hundred.
255 Q. Well, that has not been so for many years?
A. Not for several years.
Q. The average line pressure against which delivery has been made, has been from thirty to fifty pounds in the last four or five years, hasn't it?
A. No, sir. It has been higher than that in the last four or five years.
Q. It has?
A. Yes, sir.
Q. Do you undertake to say that fifty is too high for the average line pressure?
A. Do you mean the last four or five years?
Q. Yes, sir.
A. I think it has been higher than that.

By Mr. Jones: Well, I guess that is all.

(Here court adjourned until 9 o'clock a. m.)

9 o'clock a. m.

The Court: The witnesses Wyer and Levering were asked yesterday to give evidence as to the value of gas covered by the period in this petition—from a certain time up to 1916. That evidence was admitted, with the statement that the court would look into the matter. We have decided to exclude that evidence. We are unable to see how the opinion of a witness as to the value of gas covering that period can aid the court in determining the ultimate fact in the case, and that is: The reasonableness or unreasonableness of this rate at the time of the passage of the ordinance. If that evidence would be competent covering a period of five years, evidence would be competent covering a period of 20 years. The court would not
256 be able to give any weight to that kind of evidence—as to the probable value of gas twenty years hence, or five years hence.

By Mr. J. R. Fitzgibbon: The evidence must be limited to at or about the time the ordinance was passed?

By the Court: The ultimate fact to be determined is the reasonableness or unreasonableness of the rate at the time of the passage of the ordinance. The period is for five years. Council may change that. It has not been accepted. Council has a perfect right to change it at any time.

By Mr. Fitzgibbon: For the purpose of saving the question, we will take an exception.

By Mr. Roderic Jones: Motions to strike out the answers are sustained?

The Court: Yes, sir.

By J. R. Fitzgibbon: And exceptions. And offer to prove answers and exceptions.

The Court: The only matter that we are striking out is the evidence of the witnesses covering the time covered by the ordinance.

FENWICK EWING, being first duly sworn, as provided by law, testified as follows:

257 Direct examination.

Examined by Mr. Chas. W. Montgomery:

Q. Your name is Fenwick Ewing?
A. It is, yes, sir.
Q. Where do you live, Mr. Ewing?
A. I live in Newark, Licking County, Ohio.
Q. What is your business?
A. I am in the natural gas business.
Q. How long have you been engaged in that business?
A. I have been engaged in the gas business since 1891.
Q. 1901?
A. No, sir, 1891.
Q. With what companies have you been associated?
A. Originally, I was with the Fairfield Gas and Oil Company; the Fenwick Gas & Oil Company, located in Fairfield County; the

Central Contract and Finance Company for a short time. I am now with the Columbus Natural Gas Company.

Q. What official business have you?

A. I have charge of the leases and wells of the ompany, and I am attorney for the Company; General Lease and Well Superintendent.

Q. Have you any connection with any company other than the Columbus Natural Gas Company?

A. I have worked for the Medina Company.

Q. And that is located where?

A. In the Ashland field.

Q. How long have you been associated with the Columbus Natural Gas Company?

A. Ever since it was incorporated; and previous to that time.

Q. When was that?

A. It was incorporated in 1903.

258 Q. Your duties in connection with the Medina Company have been what?

A. I have done leasing and right of way work for them.

Q. State whether or not you are familiar with the condition of the field there; the production and rock pressure, and so on?

A. Yes, sir, in a general way, I am.

Q. Where does the Columbus Natural Gas Company operate, and where has it operated for the last ten years?

A. Our operations have been in Licking and Fairfield Counties.

Q. In what portion of Licking County have you operated?

A. All over Licking County, from the Knox County line on the north and Fairfield County on the south.

Q. How many wells in this field at this time has the Columbus Natural Gas Company?

A. 150 producing wells.

Q. Do you know how many wells this Company has drilled during the ten years of its existence?

A. I would like to refresh my memory on that.

(The witness consults memorandum.)

A. We have drilled two hundred and seventy-six.

Q. Are you connecetd with any company which distributes gas?

A. Yes, sir, I am President of the Ada Natural Gas & Fuel Company.

Q. That operates where?

A. It distributes gas in Ada and in Hardin County.

Q. I will ask you whether the Columbus Natural Gas Company is a producing, carrying or a distributing company?

A. It is a producing and carrying company.

Q. Does it distribute gas to consumers?

A. It does in a few small towns.

Q. What is the Medina Gas & Oil Company?

259 A. It is a producing and carrying company.

Q. Does it do any distributing?

A. Yes, sir, in a few small towns.

Q. The Ada Company is what?
A. It is exclusively a distributing company.
Q. You said that the Columbus Gas Company had drilled how many wells?
A. Two hundred and seventy-six.
Q. How many of those were dry holes?
A. Forty-eight.
Q. How many of the remaining wells have now been abandoned?
A. We have abandoned eighty wells.
Q. Do you know what the original rock pressure in this field was?
A. Yes, sir, it was originally 700 pounds in the part of the field that we operated in in Licking County.
Q. What is it now?
A. It varies in different wells, but the average rock pressure is about 200 pounds in our field.
Q. What is the effect of the reduction upon the output of the wells?
A. It prevents the Company from delivering the gas as they did under a higher rock pressure.
Q. Why is that?
A. The Company has to deliver the gas into the line against the line pressure. It varies in different places and at different times of the year, and in different portions of the day. The line pressure holds back the pressure in the well and the flow of the well.
Q. Do you know what was the original open flow of the wells at the time you began to drill? The average?
A. Yes, sir. We began active operations in 1904, and we drilled in that year ten wells, with a total production of 40,902,000. An average production of 4,090,000 per well.
260 Q. In 1905, what have you to say?
A. In 1905, we drilled 25 wells with an open flow of 95,843,792.
Q. Have you the average?
A. Yes, sir, the average is 3,335,000.
Q. In 1906?
A. I haven't that year.
Q. What other years have you?
A. I have the first two years, and the last two years.
Q. In 1911?
A. We drilled 26 wells in 1911, with a capacity of 24,628,000.
Q. What is the average?
A. 947,000.
Q. What did you do in 1912?
A. We drilled 26 wells, with a capacity of 18,143,000.
Q. And the average was what?
A. 697,000.

By Edward Kibler:

Q. Was it 26 wells in both of those years?
A. Yes, sir, in 1911 and 1912. 26 in 1912, and 26 in 1911.
Q. State, in a general way, what are the elements which enter into

the natural gas business which determine the hazards of the business. What elements, in a general way, enter into it?

A. There are a great many.

Q. What elements enter into the cost of production?

A. The securing of franchises and rights of way; paying for rights of way, and damages; pipe lines; securing leases; paying land rentals; drilling wells; paying the well rentals; distributing the gas to the cities, and furnishing meters; laying gas lines from your lines in the street to the curb; putting in curb boxes.

By Edward Kibler: These are assets.

261 By Mr. Fitzgibbon: Hazards, as well as elements of cost.

The Court: Proceed.

A. The company is liable to have damage suits frequently; damage cost by explosions; depreciation of the plant; the loss of the investment, which is entirely lost when the field is exhausted, unless a new field can be found. I suppose there are other expenses which I cannot think of at present.

Q. Do you know the average cost of the up-keep of a well at the present time? Examination, and repairs and keeping it in order, etc.

A. Well-blowers; bailing the wells; which is more expensive as the well grows older. Five dollars a well would cover the expense.

By Edward Kibler:

Q. Do you mean a month?

A. Yes, sir. Five dollars a month.

Q. What is the fact as to whether or not the cost of keeping up a well, is from year to year, decreasing or increasing?

A. It increases very materially, as the well grows older.

Q. Why is that?

A. As the rock pressure decreases, the salt water is apt to break into the well and necessitate bailing and re-tubing the well. The tubing often splits and new tubing has to be put in; and the water gets past the packer. The high rock pressure at first keeps the water back, but as it decreases, the water forces its way in.

Q. Do you know what the depreciation is of the flow of the wells in this territory?

A. It varies in different wells; a large well will depreciate

262 more rapidly than a small well. The first year, I would say that a well decreases one-half; the second year one-third, and there is a less decrease after that from year to year.

Q. Why is the decrease less in the later years?

A. The rock pressure has decreased, and it cannot put the full capacity into the line; it is held back; the pressure is held back.

Q. Did you state how the field of the Columbus Gas Company was located in reference to the fields of the other companies?

A. It is mingled.

Q. How is the cost of the production of gas by the Columbus Company as compared with the cost of the production of gas by the other companies operating in the same territory?

A. We don't carry as large a number of leases as the other companies. We are practically a producing company. We sell at wholesale; we have no franchises, practically, to guard or protect in future years.

Q. What is the cost of the production of gas by the Columbus Natural Gas Company in this field at the present time?

A. The cost of the production of gas, delivering it to the city limits of Columbia is between ten and eleven cents per thousand.

Q. In stating those figures, I will ask you if you considered at all the depreciation of the plant.

A. No, sir, simply the cost of operating the plant.

Q. Do you know what the depreciation is in such a plant as that? Do you know how much that would add to the cost of production?

A. I would say about eight per cent.

263 Q. Eight per cent on what?

A. It would add eight per cent to the cost of operation.

Q. On the investment?

A. Yes, sir.

Q. I will ask you whether or not in this rate of between ten and eleven per cent you included interest on the investment.

A. No, sir.

Q. From your experience in distributing gas in cities, do you know what the cost of such distribution is?

By Mr. Jones: I object.

Q. In other words, do you know how much should be added to the cost of production to determine the actual cost when delivered to the consumers?

By Mr. Jones: I object.

The Court: He may answer that by yes or no.

A. I don't know definitely.

Q. You said that you were a distributor of gas.

A. In small towns, yes, sir.

Q. What items should be included in determining the cost of distribution, as distinguished from the cost of production and transportation?

A. The original cost of securing the franchise and expenses; piping the city; purchasing meters; running the lines to the curb; putting in curb boxes; reading meters; collecting gas bills; damage suits arising from explosions.

Q. Is there anything else that enters into the cost of distribution other than what you have mentioned?

A. The depreciation of the plant is a very heavy item. The company lays lines to the gas field and drills wells——

264 By Mr. Jones: I object.

Q. I mean the cost of distribution?

A. I cannot tell you anything else now.

Q. I am speaking of the plant in the corporate limits. What further, if anything, have you to say in that connection?

A. The gas lines in the city depreciate much more rapidly than in the field.

Q. Why is that?

A. Owing to the chemical composition of the ground in the cities, and more especially owing to the electricity. The street car lines give off a great deal of electricity into the ground, and I have known cases where gas lines had to be renewed as often as two years. They would be entirely perforated, owing to the electricity coming from the electric lines.

Q. From your knowledge of this gas field, what have you to say as to its future?

By Edward Kibler: I object.

The Court: Is that to reflect upon the cost?

By Mr. Montgomery: Yes, sir.

The Court: He may answer.

A. I consider this gas field very far down on its decline; I don't think this field will last over 2 or 3 years longer.

By Mr. Roderic Jones: I move to rule out the latter part of the answer.

265 The Court: It is overruled.

By Mr. Roderic Jones: Note an exception.

Q. That being so, I will ask you to state if you know what would be the effect upon the gas pipes, mains and lines in the field; upon the value?

By Mr. Roderic Jones: I object.

The Court: We will sustain the objection.

By Mr. Montgomery: Exception.

Q. Are you familiar with the Ashland field? The location of the wells and the transmission system, the marketing of the gas, etc.?

A. To a considerable extent.

Q. What market does the Ashland field supply?

A. The Medina Company, which I am connected with; Lima, Kenton, St. Marys, and a number of smaller towns in that portion of the State; partly Mansfield; Medina; West Salem, and a number of smaller towns towards Cleveland.

Q. What other companies are operating in that field?

A. The Logan Company; the Ohio Fuel Supply Company. The Columbus Gas and Fuel Company drilled a number of wells up there, but I don't think they are operating at present in that field. The Medina Gas Company, and a number of other local companies.

Q. Do you know what markets these companies supply?

A. Not definitely. I know that both the Ohio Fuel and the

266 Logan Company have very large lines running into that field and have been taking out a good deal of gas.

Q. Do you know whether there is now as to that territory a sufficient market for the gas produced?

A. There isn't enough gas to supply the market that is being piped.

Q. Would you be able to determine the amount of depreciation of the plant, and the matter of interest upon the investment, so that you would know how much that would add to the cost of production of a thousand cubic feet of gas? Could you figure that out?

A. I could if I had a little time.

Q. After you are excused from the stand, will you do that?

A. Yes, sir.

Q. What, if any, experience have you had in obtaining rates for furnishing natural gas to municipalities?

A. I have secured about fifteen franchises in different towns.

Q. From your knowledge of the condition of the gas field in this territory, I will ask you to state what would be a proper gas rate for the city of Newark in March, 1911.

By Edward Kibler: I object to that.

The Court: We will sustain the objection.

By Mr. Montgomery: Note an exception.

Q. I will ask you to state, from your knowledge of the conditions of this territory, what would be a fair and reasonable rate for the sale of gas in March, 1911, in the city of Newark.

By Edward Kibler: We object. It is not competent evidence.

267 The Court: The question here, what would be a reasonable price, would depend upon what the company is entitled to receive from its investment. That is, the Company is entitled to receive a fair income from its investment.

By Mr. J. R. Fitzgibbon: This is right along the line of expert testimony which the court permitted yesterday, as reflecting upon the market price of gas to a distributing company.

The Court: You are entitled to receive a reasonable compensation for the use of the property. That is the way the Court views it; and, of course, what is a reasonable rate will depend upon very many things. It will depend — the value of the property——

By Judge Douglass: The Newark Natural Gas & Fuel Company is a distributing company. The wholesale price of gas is what it costs —what this company can go into the market and buy it from some company that is producing it and selling gas. It started out owning its own wells and bought enough to supply what was necessary; and now it must rely solely upon what it purchases. The fields have been so depleted that the price has doubled, or more than that in the last 8 or 10 years; and we claim that it is perfectly proper to ask the question that is asked here. The weight of it will vary according to the source of information which the witness develops.

The Court: The court will overrule the objection. It goes to the weight and not to the admissibility.

268 By Mr. Montgomery: Read the question.

The stenographer read the question, as follows: "Q. I will ask you to state, from your knowledge of the conditions of this territory, what would be a fair and reasonable rate for the sale of gas in March, 1911, in the city of Newark."

By Edward Kibler: We object.
The Court: It is overruled.
By Edward Kibler: Note an exception.

A. I would say twenty-five cents a thousand, net.

By Edward Kibler: We move to rule out the answer. It is incompetent.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

Q. I understood you to say that you had operated in the Sugar Grove field?
A. Yes, sir.
Q. Do you know the present condition of that field?
A. Yes, sir.
Q. How early in its history did you know of its condition?
A. I drilled the first well for the company that I organized and leased in that field.
Q. What was the rock pressure there then?
A. About 800 pounds.
269 Q. Do you know what it is there now?
A. In the Sugar Grove field proper, it is practically nothing. It is exhausted.

By Mr. Roderic Jones: I object.

Q. Well, do you know what it is?
A. Yes, sir.
Q. What is it?
A. It is nothing.
Q. Do you know how much gas is actually produced in that field now for distribution?
A. In the Sugar Grove field proper, there is practically none. The pressure is down so low that the pumps can hardly get it. There is a little in Hocking County; they are still getting some gas there.
Q. That is, at the outskirts of the field?
A. Yes, sir.

By Mr. Montgomery: You may inquire.

FENWICK EWING.

Cross-examination.

Examined by Edward Kibler:

Q. Mr. Ewing, what is the present total output of gas in the Homer-Utica field?
A. I can tell you what our company is putting out.
Q. Well, what is that?
A. We put out about nine million cubic feet a day.
Q. What is your estimate of the total daily output of the field?
A. I am not familiar with what the other companies deliver.

Q. Well, taking your company as a basis. The producing
270 wells of the Logan Company—what is your estimate of the total output per day?

By Mr. Fitzgibbon: We object.
The Court: He may answer.

Q. The total output. Per day.
A. I don't know how many wells the Logan Company has in this field. I couldn't tell you.
Q. Would it be as much as twenty-five million cubic feet a day—in this entire field?

By Mr. Fitzgibbon: I object.
The Court: It is overruled.

A. Yes, sir, I would think so.
Q. It would be a great deal more than that, would it not?
A. I am not able to answer.
Q. How much does Newark use a day? Do you know about how much?
A. No, sir, I don't know.
Q. Estimate it as near as you can.
A. I would estimate it at about $35 a meter, a year.
Q. About how much would you consider it to be daily?
A. I don't know the number of meters.
Q. $35 a meter?
A. Yes, sir, a year.
Q. There is a good deal more gas in the Utica-Homer field than Newark consumes in a day?
A. Yes, sir.
Q. There is more than twice as much?
A. Yes, sir.
Q. And more than three times as much?
A. I wouldn't say as to that.
271 Q. There always has been more than twice as much?
A. Since I have been operating in the field, yes, sir.
Q. And the city of Newark is the nearest consumer of the gas that there is to the field?
A. Yes, sir.
Q. And the field runs north, west and south of Newark?
A. Yes, sir.
Q. It surrounds it on three sides?
A. I don't think it is east.
Q. North, west and south of Newark. It surrounds it on three sides.
A. Yes, sir; not directly south.
Q. In Licking Township?
A. Yes, sir.
Q. Have you any idea of the number of wells in the Homer-Utica field? About how many are there in the field?
A. I couldn't answer that, Mr. Kibler. I know where about all of them are. I have been to them and have passed them.

Q. Have there been a thousand drilled?
A. Yes, sir.
Q. More than a thousand in this field?
A. Yes, sir.
Q. Is it worth any more in Columbus than in Newark? That is, would the fair price for gas, in your opinion, be higher or lower in Columbus than in Newark?
A. There would be some slight difference, but very little. Simply the cost of the pipe.
Q. You can deliver gas at Columbus for 10 cents, at the city limits?
A. We are not doing it.
Q. You said that that was the cost, didn't you?

By Mr. Fitzgibbon: I object.

A. I said from ten to eleven cents.
Q. The cost of gas delivered to the Columbus line was from ten to eleven cents?
A. Our cost, yes, sir.
272 Q. Has that increased lately?
A. That is what I figure it.
Q. What has been the lowest since you have been operating—the cost to deliver it to the Columbus line.

By Mr. Fitzgibbon: I object.
The Court: He may answer.

Q. What is the lowest cost price, in your experience, that your company could deliver gas to the Columbus city line for?
A. I suppose in the first two years of our production,—we were getting very few dry holes and large wells—we could deliver it for seven or eight cents; cost.
Q. What has been your contract price since you sold to the Columbus Gas & Fuel Company?

By Mr. Fitzgibbon: We object. That is a personal matter between that company and the other company.
The Court: Proceed.

Q. What has been the contract price at which you have delivered gas to the Columbus Company?
A. Ten cents. Twelve and a half cents now.
Q. What was the cheapest that you delivered it?
A. I think ten cents was our first contract.
Q. Well, you know, don't you?
A. That is my recollection.
Q. Is that right?
A. I think so.
Q. Well, do you know whether it is or not?
A. That is my recollection.
273 Q. How many different contracts have you had with the Columbus Gas & Fuel Company?
A. We have had three.

Q. What were the prices in the contracts?
A. The last was twelve and a half cents, and one contract was ten cents; and the other might have been eight or ten. I am not positive.
Q. You don't remember?
A. No, sir.
Q. How long has the last contract been in effect?
A. It went into effect in September of last year.
Q. You say that eight cents is your recollection of the first contract.
A. Yes, sir. I wouldn't be positive about that. It might have been ten cents.
Q. How long does the present contract run?
A. For five years.
Q. From when?
A. From last September.
Q. How long did the one before that run?
A. Five years.
Q. And the first contract?
A. Five years also.
Q. You testified that the first contract was eight cents?
A. I said I wasn't positive.
Q. Don't you know?
A. No, sir, I don't know.
Q. Are you positive about the second one?
A. Yes, sir.
Q. That was ten cents, delivered.
A. Yes, sir.
Q. At the city limits of Columbus?
A. Yes, sir.
Q. Did you build the pipe line to Columbus?
A. Yes, sir.
Q. And owned it?
A. Yes, sir.
274 Q. And paid the expense of construction?
A. Yes, sir.
Q. And for five years you delivered it for ten cents—until last fall.
A. Yes, sir.
Q. And now have you a twelve and a half cent contract.
A. Yes, sir.
Q. Is the gas taken from the Licking county field?
A. Yes, sir, entirely.
Q. And your best recollection of the first contract is that it was eight cents?
A. I think so. It wasn't any less than that.
Q. It wasn't any less than that?
A. No, sir.
Q. Most of the Licking County gas is sold outside of Licking County?
A. Yes, sir.

Q. That is a fact?

A. Yes, sir.

Q. The Logan Company takes it; and the Columbus Gas & Fuel Company, and the Ohio Fuel Supply Company takes it in large quantities?

A. Yes, sir.

Q. And you think that Newark ought to pay what some of the more distant cities pay for it; that we oughtn't to get any consideration, in view of the fact that we are in the heart of the field?

A. I have given you a better rate than the other cities are getting—in my estimate.

Q. Your company was willing to furnish gas, from 1905 until 1912, to Columbus for about 20 cents, weren't you?

A. We got at that time——

Q. (Interrupting.) Well, answer the question. Your company proposed to furnish gas to the City of Columbus from October 23, 1905, until July 1, 1912, for 25 cents per thousand cubic feet, with a discount of 5 cents per thousand cubic feet upon all bills paid on or before the 10th of the month, didn't you?

A. We refused to accept the franchise that passed the council.

Q. Well, it took an injunction to keep you from doing it, didn't it?

A. No, sir.

Q. You were enjoined from doing it?

A. Yes, sir; but we didn't accept the franchise.

Q. You were going to, if you had not been prevented by an injunction?

A. No, sir; we wouldn't have.

Q. That is, you differed with the court in its judgment.

That is all.

FENWICK EWING.

Redirect examination.

Examined by Mr. Chas. W. Montgomery:

Q. What would be the effect upon the low pressure wells if the total output of the field were put into the mains at a given time? If all the wells were turned in, what would be the effect?

A. In many cases, the low pressure wells would have to be shut off. The pressure in the line would be greater than the pressure in the wells.

Q. And if they were shut off, what would happen?

A. The gas would go back into the wells.

Q. What would be the effect upon the total output?

A. The smaller wells would have to be deducted.

Q. If the total amount of gas in all the wells was opened into the main, would the total output be increased or diminished?

A. It would depend entirely upon the pressure. If it increased

the pressure beyond the rock pressure of the small wells, it
276 would decrease the production.

Q. Do you know what other cities are furnished from this Knox-Licking field?

A. I know a great many.

Q. Name some of them?

A. Columbus, Mt. Vernon. Reynoldsburg, Pataskala, North Columbus, wholesale into Columbus, and a number of other towns. The West Virginia lines come up, too.

Q. In what part of the field are the majority of your wells located?

A. In Granville and Union Townships.

Q. And your main to Columbus runs where?

A. South of Granville.

Q. Directly to the corporation line?

A. Yes, sir.

Q. Will you state to the court the elements which were taken into consideration in the fixing of the 12½ cent rate for supplying gas at the corporation limits of the City of Columbus?

By Edward Kibler: I object.

The Court: It is overruled.

By Edward Kibler: Note an exception.

A. Our wells are principally located in Union and Granville Townships; about 28 miles from Columbus. Our leases are principally in those two townships. We have a very limited acreage, and we are not leasing any new fields at all; we are constantly cutting down the acreage, and we are not looking for any new developments.

277 By Edward Kibler: I move to rule that out. I don't think what they are looking for is material.

The Court: That may go out.

By Mr. Montgomery: Note an exception.

Q. How is your territory as to being compact, or otherwise?

A. It is very compact; it is principally in two townships.

Q. How does the location of your territory in that respect compare with the territory of the other companies operating in this Licking and Knox field?

A. We have one-fiftieth of the acreage that they have under lease.

Q. How is it as to being compact?

A. Ours is very compact, and the other companies extend over two or three hundred miles of gas territory.

Q. What effect do those facts have upon the cost of gathering the gas?

A. The more scattered the leases, the more expensive it is to gather the gas.

Q. What effect does that have upon the question of leakage?

A. It necessitates a large number of long-distance field lines. And there is more leakage than in main lines.

Q. Will you figure out the matter of depreciation and interest?

A. Yes, sir.

By Mr. Fitzgibbon: On the basis of one thousand cubic feet of gas, on your investment?
A. Yes, sir.

By Mr. Montgomery: That is all.

278 FENWICK EWING.

Recross-examination.

Examined by Edward Kibler:

Q. There are about sixteen thousand acres in each of those two Townships?
A. Yes, sir.
Q. Don't you go into Licking Township with some of your wells?
A. Yes, sir; most of them are along the edge of Union Township, though.
Q. And they are connected with your lines?
A. Yes, sir.
Q. How many miles of pipe line have you in Licking County?
A. About 200 miles.
Q. You have as much pipe line, per well, as any other company in this field, haven't you?
A. No, sir; I think not.
Q. Well, very near it, haven't you?
A. No, sir.

By Edward Kibler: That is all.

FENWICK EWING.

Redirect examination.

Examined by Mr. Chas. W. Montgomery:

Q. I will ask you what would be the condition or the effect upon the pipe lines when the field ceases to be a producing field?
A. They would not be of much value.
Q. What term do you use in describing that?

By Mr. Jones: We object.

279 A. A large portion of the lines would be practically junk.

By Mr. Montgomery: That is all.
By Edward Kibler: We move to rule out the last answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception. We have some authorities, and I would like to be heard further as to that matter.
The Court: Yes, sir. You can have the stenographer indicate the place.
By Edward Kibler: It will come in the general argument of the case.
The Court. Very well. We will take a few minutes' intermission now.
(Here the court took a recess.)

D. A. UPHAM, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

Q. Your name is D. A. Upham?
A. Yes, sir.
Q. Where do you reside, Mr. Upham?
A. I reside at Mt. Vernon, Ohio.
280 Q. About how long have you lived there?
A. I have made that my residence for two years.
Q. Did you live in Ohio prior to that time?
A. No, sir.
Q. State what your business is?
A. Well, sir, I am in the gas business a little, and I farm a little.
Q. Where do you operate?
A. At present, in Knox County, Ohio.
Q. Are you engaged in the production, transmission and distribution of gas—all of those features of the natural gas business?
A. Yes, sir.
Q. State to the court, briefly, what your properties are—that is, the extent of them.
A. Well, we have wells in five or six townships in Knox County and in one township in Ashland County. Seven, I believe in Knox and one in Ashland County.
Q. Are you acquainted with Knox-Licking, or Homer field?
A. I am acquainted with the Knox field.
Q. With the Knox field?
A. Yes, sir.
Q. What are some of the other companies operating there?
A. The Ohio Fuel, the Logan, the Mohican, the Columbus Gas Company and some local companies.
Q. Now, taking up your own operations, state what the fact is as to the initial rock pressure in the Knox field. First, I will ask you about the number of wells you have drilled. The total number.

(Witness gets memorandum.)

A. We have drilled 110 gas wells. 18 dry holes, and produced 39 gas wells.
Q. Those are over the territory or area that you have stated?
A. Yes, sir.
281 Q. During that time, have you any record to show how many you abandoned?
A. We abandoned 71.
Q. You may state what the initial rock pressure of this field is.
A. Our wells will vary from 50 pounds to 250 pounds, possibly, the best.
Q. Have your operations been confined to two years in that field?
A. No, sir. Seven years of operation in that field.
Q. The experience of seven years?

A. Yes, sir. We began in July, 1905.

Q. Going back to July, 1905, what was the rock pressure at that time in the field?

A. It was about 750 pounds.

Q. What was it two years ago?

A. About 170 pounds to 175 pounds.

Q. What have you now?

A. The oldest wells are down to 50.

Q. As a rule, when do you abandon a well because of the rock pressure?

A. It depends upon the location of the well, considerably. If we cannot get the line pressure down to below the rock pressure, we abandon the well; but there are some places where we can get the pressure lower than others.

Q. What per cent of your property are old wells?

A. The wells that we drilled the first year are all abandoned. The wells that we drilled in 1905 and the winter of 1906 have all been abandoned.

Q. What about the second year?

A. The second year, we drilled ten, and seven of them have been abandoned.

Q. What is the rock pressure of the three remaining wells?

A. They are the lowest. They are about fifty pounds.

282 Q. You may state how many you drilled the third year.

A. The third year we drilled eleven wells.

Q. What has been their history?

A. Their history was not very good. We abandoned seven of those.

Q. Can you recall as to 1909?

A. Our wells for 1909 were better. They were better protected. They were not subject to the neighbor-development so much, and they were better wells.

By Edward Kibler: How many in that year, 1909?

A. We only drilled eight wells in 1909.

Q. Now, tell how many were abandoned, if any?

A. I think there are only two of those which are abandoned.

Q. What is the rock pressure of the remaining?

A. From 60 to 80 pounds, I will say.

Q. State to the court, what, if any, cost of operation there is in wells which are depleted in their pressure?

A. Well, it costs a little more to operate an old well than a new one, of course. We have new wells which we do not have to have a man go to them more than once a week. The old wells, they usually visit them from about three times in a week to every day in the week.

Q. That is brought about by what cause?

A. By the water. When the rock pressure gets down a little, water prevents the flow of gas; and you have to remove that oftener because of the fact that your rock pressure is low.

Q. The yield that you get from a given number of wells, when

reduced to 60 or 70 pounds pressure, as compared with 750 pounds pressure, of which you spoke—how do they compare?

283 A. The new wells are always the largest, and you get a large yield from them. A year ago we drilled in, on the 10th of December—1911—we drilled a well in that showed 5,200,000. On the 7th of January we drilled one in that showed 4,800,000. When they were a year old, one of them showed 620,000, and the other one showed 430,000.

By Edward Kibler: I would like to have those figures again. The first was what?

A. 5,200,000.

By Edward Kibler: January 7th was what?

A. 4,800,00-.

By Judge Douglass:

Q. Taking your experience as you have outlined it, have you the means of knowing, and do you know, the cost of producing gas at wholesale? If you were going to dispose of it at wholesale.

A. If I was producing gas to wholesale it, if the parties who purchased gas would take just what I had, and if I didn't have any specific amount to furnish—that is an advantage over having a specific amount to furnish I do not know whether that is an answer to your question or not.

Q. Well, that is getting to it. Have you any control over the quantity of the gas?

A. The only control over the quantity is to keep on drilling. The more wells I drill, the more gas I get.

Q. Explain why it is, if you have a specific quantity to furnish, the price must be higher.

A. Yes, sir.

Q. Well, why is that so?

284 A. Because you have to carry a surplus. I might drill a half dozen wells that would not produce any gas, and in the meantime those would be depleting rapidly and maybe next month I would not be able to fulfill the required amount that I had agreed to.

Q. What would you be required to do?

A. To shut some one off, or to acquire the gas from some other source, or to drill.

By Edward Kibler: I do not see how it is important, as to guaranteening gas.

By J. R. Fitzgibbon: I think it is. The company has to be able to furnish the peak-load-service.

By Edward Kibler: They never have done that.

By J. R. Fitzgibbon: They are compelled to do that.

By Roderic Jones: Do counsel claim that there is a guarantee of that kind to the City of Newark?

By J. R. Fitzgibbon: There is a guarantee to furnish proper service.

The Court: You may proceed.

Q. Have you any knowledge of the cost of gas at retail? I mean,

the worth of gas, or price, where it is brought from the wells to the consumer.

A. I think the price to the domestic consumers of Ohio varies in pretty near every town.

285 Q. Do you know the price in a large number of towns in Ohio?

A. I do not know it except by hearsay. It has been repeated to me; from the consumers; as a rule, that is where I got the information.

Q. Do you furnish gas at all to towns or villages?

A. We furnish some domestic consumers with gas.

Q. Do you distribute gas?

A. Yes, sir, we furnish some domestic consumers with gas.

Q. In what town?

A. In Mt. Vernon.

Q. It is confined there, is it?

A. Yes, sir.

Q. Is that the only town that you distribute gas to?

A. Yes, sir.

Q. State to the jury generally, the risks attending the development of the natural gas business. The hazards and risks of the business.

A. The worst experience that I have had was in attempting to get gas. I drilled ten wells this summer and only three of them produced gas. I do not know whether that is an answer to the question or not. That is my experience.

Q. Was that this last summer?

A. Yes, sir, in the last eight months.

Q. Seven were dry out of ten?

A. Yes, sir.

Q. Were those scattered over your territory?

A. They were in two different townships. Some of them were about one-half a mile apart.

Q. What is your experience in reference to the rental proposition—the surrender of leases and so on?

A. We carry anywheres from ten to sixteen or seventeen thousand acres. Something will turn up—a dry hole is drilled, and we surrender, and take up some land somewhere else. And in that

286 way we keep shifting around, and carry a little more acreage than we are operating.

Q. What is the loss by way of leakage? Is that a factor?

A. Yes, sir, to some extent.

Q. In the natural gas business, what are the chief factors that enter into the worth of gas, or the fixing of the rates?

A. There is always a market for the gas, but there is always a question as to what it is worth. My experience has been that I did not get what my gas was worth because the other fellow was always ready to sell it for the same price, or even less. All the gas that I sold was very cheap gas.

Q. You didn't have lines out of the field, except to one town?

A. No, sir.

Q. How long have you been supplying Mt. Vernon?
A. Seven years.
Q. Have you any way of determining—when you developed your first wells, what was the amount that they then would produce, as compared with the present time, in million cubic feet, or whatever it is?

By Edward Kibler: I object.
The Court: He may answer.
By Edward Kibler: Note an exception.

A. I tested four wells April 1, 1910, with a meter. I was purchasing those wells. And two years and three months subsequent to that time, I tested them again, and they had declined 25% each year for the two years.

287 Q. Taking those wells into account, have you any recollection as to the amount, in cubic feet, that they averaged on the first test and the second test?

A. They were from two to four years old when I purchased them; and they put in the line, when I purchased them, from 35,000 to 40,000 a piece. And when I tested them again, they put in the line about 20,000 a piece.
Q. In drilling a new well, what is the fact about the rock pressure—as to how much it is?
A. That would depend upon the location.
Q. Well, the average territory.
A. Do you mean in the old territory?
Q. Yes, sir.
A. You would get a similar rock pressure to the old wells. If you would drill within a radius of half a mile of an old well, the rock pressure would be about the same as the old well, or possibly a little more than that. That would depend upon the conditions.
Q. If the field has gone down to 100, would it be possible, if you drilled in a new well, to get a better pressure than about 100?
A. You would very rarely get the virgin pressure anywhere, unless you would get into another district where a new development was struck.
Q. Have you had any experience in the Sugar Grove field?
A. No, sir.
Q. Or in the Ashland field?
A. I have had a little in the Ashland field, yes sir. I have drilled some up there, and have got some dry holes.
Q. What is the rock pressure in the Ashland field as to its diminution? Has it been rapid, or otherwise?

A. Before I commenced drilling, I put a gauge on some
288 wells. I wanted to find the rock pressure. I shut it and let it stand for an hour or two and that would give me an idea about the pressure. That is all the knowledge that I have about the old wells, or wells drilled before last April.
Q. What did that show?
A. A number declined very rapidly. Occasionally I would find

a well that was isolated from other wells that had a good rock pressure.

Q. Do you know about the average pressure in the field?

A. We got one a little better than 1,100.

By Edward Kibler: Do you mean rock pressure?

A. Yes, sir.

By Edward Kibler: 1,100 pounds?

A. Yes, sir.

Q. Of those that you examined, what was the lowest?

A. I found a well within a mile and a half of this 1,100 pound well, that had only 280 pounds. The well had been shut in for some time, and evidently the well had its full rock pressure then.

The Court: We will adjourn now until one o'clock.

Here court adjourned until one o'clock p. m.

Afternoon Session, One o'clock p. m.

By Roderic Jones: If the court please, an order was made sometime ago, ordering the excess of the rate, as fixed by the ordinance, and the rate actually collected, paid to a receiver. This morning, the expert accountant had occasion to use the Receiver's accounts for the purpose of checking some matters which he had in connection
289 with the case. The Receiver refused to allow him to see them. I will ask the court to make an order that the Receiver allow Mr. Sutor to examine his accounts.

The Court: What is the objection to the order?

By Roderic Jones: The objection come from the Receiver, and not from these gentlemen.

The Court: The court will make the order.

By Roderic Jones: I will put an order on to that effect.

D. A. UPHAM.

Direct examination (resumed).

Examined by Judge S. M. Douglass:

Q. Just a question or two, Mr. Upham: Mr. Upham, the plant as you have detailed it here—how do your operations differ from the Ohio Fuel Supply Company and the Logan Company and the other large companies, operating in that field, if at all? I mean, as to the amount of equipment and transportation facilities.

A. Of course, they have a very extensive equipment; larger pipe lines and pumping stations.

Q. Is it necessary for you to have those?

A. I haven't any pumping station. My lines are all short. The equipment would not compare at all, per well, to market my gas, as with the larger companies.

Q. Your pipe lines are not large?

A. No, sir. They are not large, and they are not long.
290 Q. Are they all in this territory that you have spoken of?
A. Yes, sir, my longest line is not over twelve miles long.
A. Now, in the sale of the product, how do the seasons of the year differ, in respect to the sales? In the summer, fall, spring and winter.
A. As to the amount of gas?
Q. Yes, sir.
A. Well, it declines a little in the summer, but my market is principally to manufacturing plants, and they use within five per cent as much in the summer, as in the winter.
Q. And how would the domestic consumption be?
A. Our domestic consumption is very very small in the summer. It is not very large in the winter. I think, in the summer, we sell about $600 worth of gas in a month to domestic consumers, and in the winter about $3,000 per month.

By Judge Douglas: You may inquire.

D. A. UPHAM.

Cross-examination.

Examined by Edward Kibler:

Q. How long do you say you have been operating, Mr. Upham?
A. In this particular field do you mean?
Q. Yes, sir.
A. Since June, 1905.
Q. And in that time, you have drilled, you say, 110 wells, and bought 39; and that of the 110 wells, eighteen were dry ones.
A. Yes, sir; that is correct.
Q. Have you any record of the rock pressure of your entire system now?
A. Just absolute, no, sir.
291 Q. You cannot give the average from any recent tests made.
A. No, sir. We would probably have to shut the well off for 24 or 48 hours and maybe some wells would have to be shut in for a week.
Q. These wells, which you recently drilled, which you say seven out of ten were dry holes—in what territory were they drilled?
A. Five were in Pike Township, Knox County. One was a gas well and the four were dry. The others, in Ashland County.
Q. Half were drilled in this territory?
A. Yes, sir.
Q. And half in Ashland County?
A. Yes, sir.
Q. How far apart were the wells?
A. The wells in Knox County were from one-half mile to a mile and a half apart.
Q. What acreage have you under lease?

A. Do you mean all told?
Q. Yes, sir.
A. It varies 14,000 to 18,000.
Q. Do you mean acres?
A. Yes, sir. Only last month we surrendered 2,600 acres, and in two weeks later we took up 4,300 acres.
Q. In different territory?
A. Yes, sir. Shifting around.
Q. What is the present capacity of your plant? How many cubic feet?
A. Do you mean how much gas could I deliver to sell?
Q. Yes, sir. What is the capacity?
A. It is hard to say how much we could possibly deliver if we would put it to a test, but we are selling about four million a day, or one hundred and twenty million a month at this time.
292 Q. How near is your nearest territory to the Licking County line?
A. We have a few wells within a half a mile of it. In Morgan and Millford Townships.
Q. That is about fourteen or fifteen miles from Newark?
A. Yes, sir, I would think so. About that.
Q. You are not very familiar with the Licking County field, are you?
A. No, sir.
Q. You don't know the number of wells or what capacity the wells have?
A. No, sir. Only from the knowledge that they have been drilled a good while, and they are likely to be about the same thing as the others.
Q. What disposition have you made of your output?
A. My principal market is manufacturing plants.
Q. What has been the prices that you have received from manufacturing plants?
A. There are about four months in the summer that I sell it for ten cents, and the balance of the year I get twelve cents.
Q. And how long have those prices prevailed?
A. About three years.
Q. What did you get before that time?
A. We didn't get so much. I believe one year it was eleven; and two or three years before that it was ten. I believe I started in with about an eight cent rate.
Q. To what manufacturing plants do you deliver? Where are they located?
A. In Mt. Vernon.
Q. And it was eight when you started?
A. Yes, sir.
Q. How long was it eight?
A. I think only about one year. Possibly two years. I am not certain.
293 Q. And then you sold it for ten cents?
A. Yes, sir. One year for ten and then eleven and the last three years twelve.

Q. Have you contracts for that rate?
A. Yes, sir.
Q. How long do they run?
A. Most of them have expired at this time.
Q. Have you made any recent contracts?
A. I made a contract with one factory which uses about one hundred thousand a day, about three months ago. That is the only one that I made this year.
Q. How far are those factories from your field?
A. We have wells within a quarter of a mile of some of the factories.
Q. Within what maximum distance?
A. Twelve miles.
Q. Between a quarter of a mile and twelve miles?
A. Yes, sir.
Q. You own your own pipe lines, do you?
A. Yes, sir.
Q. And you constructed them yourself?
A. Yes, sir.
Q. What per cent of your output do you deliver to factories?
A. It will vary. But my domestic consumption was not over—I am only guessing at it,—but I think not over ten per cent of the gas.
Q. And ninety per cent is industrial consumption?
A. Yes, sir, about that.
Q. Where do you deliver gas domestically?
A. In Mt. Vernon.
Q. For how long?
A. Two years the 20th of December.
294 Q. Did you distribute it yourself?
A. Yes, sir.
Q. And you have a pipe line in Mt. Vernon?
A. No, sir, I lease the Mt. Vernon Gas Company's old artificial lines.
Q. They are leased lines?
A. Part of them. We have some general delivery lines in the corporation. Lines to feed into the domestic lines.
Q. What prices have you received at Mt. Vernon from consumers?
A. Eighteen cents.
Q. Is that net? Is there a discount?
A. No, sir, that is eighteen cents net.
Q. Have you contracts for that?
A. We have a contract with the Gas Light Company for their plant. I leased their plant, and I sell the gas to the consumers. And the rate we are charging is eighteen cents. The franchise would call for more of a rate.
Q. The franchise is more than that?
A. Yes, sir.
Q. Do you know what the franchise rate is?
A. I believe twenty cents this year, net.
Q. You haven't changed it from eighteen cents?

A. No, sir.
Q. Have you competition there?
A. Yes, sir.
Q. What other companies are delivering gas there to domestic consumers?
A. The Ohio Fuel Supply Company.
Q. Anybody else?
A. No, sir.
Q. And the town is supplied by the Ohio Fuel Supply Company and your company?
A. Yes, sir
Q. And that is the price that you have received for domestic consumption during the time that you have delivered gas to the City of Mt. Vernon?
A. Yes, sir.
295 Q. What does it cost you to care for your lines per well? What is the expense?
A. Well, we have to have more men to take care of them—I would think that to take care of the wells, and do it properly——
Q. (Interrupting.) Well, what are you paying?
A. We are paying our men so much a month for doing that.
Q. How many men have you?
A. We have eight men who look after the wells.
Q. What do you pay them?
A. Seventy dollars.
Q. A piece?
A. Yes, sir.
Q. How many wells do they look after?
A. They look after about eleven a piece. On an average of eleven a piece.
Q. That makes about eighty-eight wells that you have that are producing wells?
A. No, sir, we have only seventy-eight.
Q. Seventy-eight?
A. Yes, sir, seventy-eight that are producing there.
Q. What is the maximum capacity of any well that you have?
A. At present, do you mean?
Q. Yes, sir.
A. Two that I spoke of a while ago are the largest in that Knox field.
Q. What is the capacity?
A. One of them is 430,000, and the other is 480,000.
Q. Do these eight men have any other duties except to look after the wells?
A. No, sir, they do not. And we have to assist them very frequently with expert men. They have a gasoline bailing machine that we use. Each man has a bailing machine.
296 Q. Do you know the price that the Ohio Fuel Supply Company gets for domestic delivery in Mt. Vernon?
A. I didn't see their books, but it is generally understood that they get eighteen cents.

Q. The same as yourself?
A. Yes, sir.
Q. How long have they been there?
A. They were there when I came.
Q. That was in 1905?
A. Yes, sir.
Q. Do you know what the average rock pressure is in the Knox field now?
A. It would be pretty hard to determine the average. From fifty to two hundred and fifty. There are more wells of a low rock pressure than of the better class.

By Edward Kibler: That is all.

D. A. UPHAM.

Redirect examination.

Examined by Judge S. M. Douglass:

Q. You spoke about the industrial consumption. Do you make any individual contracts?
A. We haven't made any in the last year, except the one that I spoke of, about three months ago.
Q. The domestic rate is twenty cents by ordinance?
A. Yes, sir.
Q. Does that go up in an ascending scale?
A. I believe that the twenty cent rate continues for two years yet.
Q. And do you know the price then?
A. I don't believe there is a rate after that.
Q. What investment have you in the city of Mt. Vernon, as far as the distribution is concerned?
297 A. I haven't any, as far as the distribution to domestic consumption. I have lines that supply the domestic pipes.
Q. Those are the lines that carry it to the distributing system?
A. Yes, sir.
Q. To the manufacturers?
A. Yes, sir, and also pass into the distributing system.
Q. Taking into account the conditions as you know them, and the factors of production, transmission, distribution and assuming that the distribution system is owned by the party distributing, what do you say would be a fair and reasonable price, at Newark, for natural gas?

By Edward Kibler: I object.
The Court: He may answer.
By Edward Kibler: Note an exception.

A. So far as delivering gas to Newark, it would be an approximate estimate. My idea of supplying domestic consumption is that it is an expensive one, from the fact that you have to carry such a large supply of gas to take care of the few cold days; and, in doing that, you have so much idle gas that you do not get a chance to use only

a few days in the winter. As far as piping gas to Newark, I would have to have a pumping station as well as a line; and I do not like the domestic consumption as a market for gas. It is too big an expense for the returns that you get on the investment. My proposition at Mt. Vernon is a very discouraging one to me, as far as furnishing gas for eighteen cents to the domestic consumers. The market that I have—the manufacturing plant—at twelve
298 cents, is a desirable one. They take a specific amount, and I can depend upon that much money each month. And in the year, my returns are larger than if I was selling it all for eighteen cents, and have the weather control the amount that is used. I wouldn't know just exactly——

Q. (Interrupting.) Well, approximate it.

By Edward Kibler: I object.

The Court: He may answer.

A. I would sooner furnish gas at Mt. Vernon to manufacturing plants for twelve cents than at Newark, for domestic, delivering it at the line, for eighteen or twenty cents.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is sustained. The answer is not responsive to the question. It may go out.

By Judge Douglass: You have answered what the price would be delivering it at the line. What would be a fair and reasonable price to deliver natural gas—producing it, transmitting it, and distributing it, with proper facilities, to the City of Newark?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

299 A. If I had the gas to do it with, I might get at a fair idea of it, but, under the circumstances—considering the condition of the field, I would think the City of Newark should have to pay about thirty cents for their gas.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

By Judge Douglass: That is all.

A. D. UPHAM.

Recross-examination.

Examined by Edward Kibler:

Q. You have to pay rental for the pipe that you have leased from the gas company?

A. Yes, sir.

Q. Have you any objection to stating what that annual rental is?

A. It is twenty per cent of the gross that I pay for the use of the pipes.

By Edward Kibler: That is all.

By Mr. Montgomery: I asked Mr. Ewing to get certain information. I will ask to put him on the stand now.

The Court: All right.

300 FENWICK EWING (recalled).

Examined by Chas. W. Montgomery:

Q. Since you left the stand this morning, have you made investigations as to the investment of the Columbus Natural Gas Company and the depreciation of its property, so that you can say how much should be added because of those factors to the cost of production of that company?

A. Yes, sir.

Q. How much?

A. I figured it at four cents a thousand on the amount delivered.

Q. And you mean that that should be added to the ten or eleven cents that you gave this morning?

A. Yes, sir.

Q. In view of that evidence, will you state to the court why you sell gas at the corporate limits of Columbus for twelve and one-half cents? What facts lead you to do that?

By Edward Kibler: I object.

The Court: The objection is sustained.

By Mr. Montgomery: Note an exception.

That is all.

FENWICK EWING.

Cross-examination.

Examined by Edward Kibler:

Q. When was it that you made your last contract for gas
301 with the Columbus Gas and Fuel Company?

A. It went into effect in September, but it was made last April.

Q. And you had a contract with them before that time, did you?

A. It had expired.

Q. What was that rate?

A. Ten cents.

Q. Now, with your experience in delivering gas to Columbus, originally, perhaps, for about eight cents, and then for five years for ten cents, your company made a new contract for five years taking effect last September, for twelve and one-half cents?

A. Yes, sir.

By Edward Kibler: That is all.

JOHN M. GERARD, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

Q. Your name is John M. Gerard?

A. Yes, sir.

Q. You are the superintendent and general manager of the Ohio Fuel Supply Company?

A. I beg your pardon, but I have a larger title that that. I am Second Vice-President and General Manager.

Q. You reside where?

A. Columbus, Ohio.

Q. And the general offices of the Ohio Fuel Supply Company are located where?

A. The Ohio Office is in Columbus. Our general office is in Pittsburgh. That is the headquarters of quite a number of different companies, but we recognize Columbus as the general office of the Ohio Fuel Supply Company.

302 Q. You are in charge of that office, are you?

A. Yes, sir.

Q. How long have you been in the business of the production and transmission and distribution of natural gas?

A. I have been in the natural gas and oil business for about thirty years. In the natural business entirely for about fifteen years. All during the oil experience, I had some gas experience.

Q. State in what fields you have had experience?

A. The Ohio Fuel Supply Company has two departments: The producing and the selling. I am really not very familiar with the producing end of it. My part of the business entirely is selling; and the only thing that I know about the production of gas is what I know about the pressure in the early days, and how it has been gradually running down, and all that, but as to the fields, I haven't kept in touch with them at all. The boys come in and they tell me that they got a well at a certain place, and the next day that they got a dry hole. I do not charge my mind with those things because they are not in my department.

Q. Now, having control of the selling end of it, state whether or not you know the general prices for the sale and distribution of gas in Ohio, generally?

A. Generally speaking, yes.

Q. And have you in the locality of Newark? I mean the surrounding cities and towns in every direction?

A. Yes, sir. I may modify that by stating: Particularly with our company. I might not be so familiar with the prices of other companies.

Q. How many towns and cities do you supply in Ohio?

A. I think we have about ninety-eight.

303 Q. State where they are located—I mean, generally?

A. I think I can best describe that by saying that we start

at Cincinnati and take a northeast course through the State and supply practically every town along the Pennsylvania and B. & O. road from Cincinnati to St. Clairsville, outside of Newark.

Q. Do you furnish gas to any portion of Cincinnati? I mean, domestic delivery to any portion of Cincinnati?

A. No, sir, we sell at wholesale at the city limits.

Q. Do you supply gas in Columbus for domestic consumption?

A. Yes, sir.

Q. [illegible] do you sell gas at wholesale?

A. No, sir, not at wholesale. We sell gas to a portion of the city, and distribute it through the lines of the Columbus Gas and Fuel Company on a percentage basis. We have in Columbus about ten thousand domestic consumers.

Q. Your sources of supply for these 98 cities and towns—do you draw from the Sugar Grove and Homer-Knox, the Licking, and the Ashland fields?

A. Yes, sir, and West Virginia.

Q. And West Virginia?

A. Yes, sir.

Q. Then it becomes necessary for you to have a line leading from the Ashland field, southward?

A. I beg your pardon.

Q. You have lines from the Ashland field, south?

A. Yes, sir.

Q. How long have you been engaged as you have stated? Relating to the selling end of gas, drawn from these fields, to your towns?

A. We have been drawing from the Knox-Licking field about ten years; and from the old Sugar Grove field in a small way.

304 Probably I can make it so that these gentlemen will understand the Ohio Fuel Supply Company. It is made up from a number of smaller companies. The Crooksville, Bremen, Rushville, and the United Fuel, with headquarters at Cambridge, Ohio; the Great Southern Gas Company, at Zanesville; the Crawford interests owned all those different companies, and they were all merged into one. We were at that time taking gas from the different localities for these different companies. At Cambridge, we got local gas, which we took care of them with. At Zanesville—it got its supply from the Sugar Grove; and Bremen and Rushville had local gas. When we bought the Federal Gas Company at Columbus, it was getting its supply from Sugar Grove. After we bought the Great Southern, we laid a line from the Knox-Licking to Zanesville, and since that time we have connected up practically all of these towns with the Knox-Licking field and the Sugar Grove field; and Ashland and West Virginia. So that about all the gas is coming from the larger fields, the local supply having been practically exhausted.

Q. Can you tell about what percentage of gas you draw from West Virginia?

A. We have been getting about forty per cent of our gas from West Virginia. If there is extreme cold weather, and it is necessary

to take care of the peak-load, we then call on West Virginia for the surplus.

Q. And that demand, made in extreme weather, makes about forty per cent?

A. Yes, sir.

By Edward Kibler: Is that forty per cent of the year's supply?

A. It would be about thirty-three and one-third per cent
305 for the entire year. We aim to take about thirty-three and one-third percent of the supply from West Virginia, the year around.

Q. Take all the gas that is produced in Ohio—do you know what percentage that bears to the entire amount of consumption of gas that is used in Ohio?

A. No, sir, I don't. I wouldn't be able to say as to that.

Q. What would you say would be a fair and reasonable price, or rate, to be charged to domestic consumers in the City of Newark, Ohio?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. I might be biased as to that, Judge, but I would say: Most assuredly thirty cents would be a reasonable rate, because I take it that Columbus is just as conveniently located to the fields as Newark is, and we get thirty cents there.

By Edward Kibler: I move to rule out the answer.

The Court: The latter part of the answer is not responsive to the question and it may go out.

By Edward Kibler: We wish exceptions to not ruling out the other part of the answer.

Q. You say that a reasonable rate for Newark, Ohio, would be thirty cents?

306 By Edward Kibler: I object.

A. Yes, sir.

By Edward Kibler: I do not think he is entitled to rub it in.

The Court: That is what he said.

Q. What is the price for domestic consumption in Columbus, Ohio?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. The rate is thirty-five cents, with a discount of five cents a thousand, making thirty cents net.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Is that the rate with all the companies distributing there?

A. Yes, sir.

By Edward Kibler: I move to rule out the answer. And I object to the question.

The Court: The objection is overruled.

307 By Edward Kibler: I wish an exception. I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Do you know about how many domestic consumers there are in Columbus?

A. I think about 42,000.

Q. What companies besides your company are involved in the distribution?

A. The Columbus Gas and Fuel Company.

Q. What is the rate or price of gas in the City of Zanesville, Ohio?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. Twenty-five cents, net.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Do you know the price that is fixed and established at Springfield, Ohio?

By Edward Kibler: I object.

308 The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. Thirty cents net.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Do you know the price at Coshocton, Ohio?

A. No, sir, I don't.

Q. Do you know the price at Cambridge?

By Edward Kibler: I object.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. Twenty-five cents.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Do you know the price at Cleveland?

By Edward Kibler: I object.
309 The Court: Do you think it is right to go out of the field?
By Judge Douglass: No; I will withdraw that.

The Court: Did you answer the question?
A. No, sir, I did not.
Q. Do you know the price at Marion, Ohio?
A. No, sir.
Q. Do you know the price at Delaware, Ohio?

By Edward Kibler: I object.
The Court: The objection is overruled.
By Edward Kibler: Note an exception.

A. Thirty cents.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

A. It is thirty cents under the new rate ordinance. I think a new rate ordinance was just passed there.
Q. Do you know what the average domestic rate is for all your cities and towns? Do you know what that average rate is?

By Edward Kibler: I object.
310 The Court: Drawn from the same source?
By Judge Douglass: Yes, sir.
The Court: He may answer.
By Edward Kibler: Note an exception.

A. I cannot answer as to the average rate. I could not tell you what the average is. There are too many of them. They vary.
Q. Now, going into other matter: Do you know, Mr. Gerard, the cost of producing, transporting and distributing gas by the Ohio Fuel Company?
A. I do not.

By Judge Douglass: Well, I will withdraw that question.

Q. Under your contract to furnish gas at wholesale at Columbus, what is the net rate? What does it amount to? Per thousand cubic feet.
A. Well, we have a peculiar contract at Columbus. It is distributed at Columbus through the lines of the other company; and we get everything from the price of thirty cents, less the cost of distributing. I will say that we get twenty-eight cents a thousand for the gas distributed in Columbus.
Q. Well, I am asking for the wholesale price where you do not distribute at all. Just produce it in the field and transport it in to Columbus. What is the price that you receive?
A. Do you say delivering at Columbus?
Q. Yes, sir.
A. We sell gas to the other gas company on a per cent
311 basis, and that nets us about twenty-eight cents for the gas. We simply turn the gas through the other company's line.

It was a different section of the city that was cut off for our distribution, and we turned the gas through their lines. It is entirely different than in any other place.

Q. Do you sell gas at Springfield at wholesale?

A. Yes, sir.

Q. What price do you get?

A. Twenty-one cents.

Q. Do you sell at wholesale at Cincinnati?

A. Yes, sir.

Q. What is the price that you get there?

A. The present rate at Cincinnati is eighteen cents, but it changes to nineteen within the next few months; and in two years to twenty-two cents.

Q. Do you sell to Hamilton?

A. Yes, sir.

Q. Who do you sell to?

A. To the City.

Q. What do they pay?

A. Twenty cents a thousand at the city limits.

Q. Do they distribute?

A. Yes, sir. We measure it to the City of Hamilton through meters.

Q. About how many towns in the ninety-eight that you have mentioned do you sell to without distributing?

A. Springfield, Hamilton, Middletown and Cincinnati.

Q. What is the price at Middletown?

A. Twenty-one cents.

Q. Do you sell to any other city—they having their own distributing plant?

A. No, sir, no others.

Q. What would be approximately the difference in cost,
312 if any, between distributing to the towns and cities that you have mentioned, and distributing to Newark, or furnishing to Newark, wholesale?

A. Well, I think the additional cost, as between Cincinnati, should not be over one cent, or a cent and half a thousand.

Q. Would the other towns be about the same?

A. I was giving you the furtherest town—Cincinnati.

Q. Do you sell to other companies?

A. Yes, sir.

Q. Do you sell from the Sugar Grove field to the Logan Natural Gas and Fuel Company?

A. Yes, sir.

Q. At what price, sixteen and one-third, or one-fourth.

A. I am not sure which.

Q. They buy from you at wholesale?

A. Yes, sir.

Q. Have they their own pipe lines for distribution?

A. Yes, sir.

Q. Wherever they want to take it?

A. Yes, sir.

Q. Do you sell to any other company?
A. Yes, sir. To the Mohican, in the Ashland field.
Q. They are right close by?
A. Yes, sir. We sell the gas right in the heart of the field.
Q. That would be a special rate, would it?

By Edward Kibler: I object.

Q. Or, would it?

By Edward Kibler: That is leading.

Q. State what the rate is?
A. Fifteen cents a thousand.
Q. That is from one company to the other?
A. Yes, sir.

313 By Edward Kibler: I move to rule out the testimony as to the price of gas in Zanesville and Springfield and Cambridge, Delaware, and Columbus.
The Court: The motion is overruled.
By Edward Kible: Note an exception.
By Judge Douglass: That is all.

JOHN M. GERARD.

Cross-examination.

Examined by Edward Kibler:

Q. You distribute in 94 of the 98 towns that you mentioned?
A. Yes, sir. I think in every town but the four I mentioned.
Q. What is the lowest net price that you furnish gas for?
A. I think we have one or two little towns in the Corning field, eighteen cents.
Q. Is that the lowest?
A. Yes, sir.
Q. What has been the lowest that you have ever sold it for—distributing it—since you have been operating?
A. We have sold gas in Mt. Vernon, at fifteen cents.
Q. At any place any lower than that?
A. No, sir.
Q. How long did you sell it there for fifteen cents?
A. I think about three years. We had a contract——
Q. (Interrupting.) And you raised it to eighteen cents?
A. Yes, sir.
Q. That is what you are selling it for there now?
A. Yes, sir.
314 Q. How long have you been selling it for eighteen at Mt. Vernon?
A. I think a little over two years.
Q. The contract has not expired there?
A. Yes, sir, it has.
Q. It has expired?
A. Yes, sir.

Q. Do you still sell it at eighteen?
A. Yes, sir.
Q. Did you ever have any other eighteen cent rate towns in your territory?
A. Yes, sir. In the Corning field, in the early days, at eighteen.
Q. Is there any other place than Mt. Vernon, where you are selling it at eighteen now?
A. I think so, yes, sir.
Q. Where?
A. I think we have an eighteen cent rate at Glouster.
Q. Where is that?
A. In Perry County.
Q. How many miles from Columbus is that?
A. About sixty.
Q. The field around there has become exhausted?
A. No, sir. We are supplying a great deal of the gas from a local field. The field is small, but we still have pressure enough to give them some gas.
Q. Are there any other places where you are now, or have, supplied gas at eighteen cents?
A. I have no recollection of any places only the towns that I have mentioned.
Q. Well, I mean in your experience with the company, in the last fifteen years.
A. I would not pretend to say that they did, or not.
Q. Have you any points of distribution in your system now, or have you had heretofore, where you sold it at twenty cents?
A. We have had, and we have now.
315 Q. Where?
A. At New Straitsville and Shawnee.
Q. Is there any competition there?
A. No, sir.
Q. Is that all that you know of?
A. I don't recollect any other at twenty cents, outside of those two.
Q. Where you do now, or have furnished gas for twenty cents net.
A. Well, I didn't say that we didn't other places, but I don't recollect them.
Q. Have you a pipe line connection between the field in Licking County and Cincinnati?
A. Yes, sir.
Q. What kind of lines are they?
A. We have an eighteen inch line from Homer to Cincinnati.
Q. Was it built by your company?
A. Yes, sir.
Q. Do you know what it cost, approximately, but not exactly. What was it?
A. About two and one-half million dollars.
Q. When was it completed?
A. About five years ago.

175

Q. And you never got over eighteen cents for the gas that you delivered down there to Cincinnati.

A. I am not free to say that we have not. We had a former contract. I think it was more than eighteen cents.

Q. You didn't deliver gas under that contract, did you?

A. Yes, sir.

Q. Did you ever have a lower rate down there through that pipe line?

A. No, sir.

Q. And the last five years you have been delivering gas through the pipe line down there?

A. Yes, sir.

Q. Is it that line that reaches Middletown and Hamilton and the other cities?

A. Yes, sir.

316 Q. What per cent of gas that you delivered through that line came from the Homer field?

A. All of it.

Q. All of it?

A. Yes, sir. That is, all up to this winter. We put some West Virginia gas through there this winter. A small portion.

Q. How much gas have you delivered through that line in the last year?

A. I couldn't tell you. We have a contract to deliver to Cincinnati 2,500,000,000 cubic feet a year.

Q. And you have been delivering that since you had the contract there.

A. We had a former contract, but I don't remember how long it ran. A new contract was made.

Q. About how much gas does a city of about 25,000 people consume in a year, under normal conditions, for domestic service?

A. It would depend very largely on the price of gas.

Q. Well, under normal conditions. If the price were reasonable.

A. There would be a difference of opinion as to a reasonable price.

Q. Well, if you come within a million, it will satisfy me.

A. We figure that we must be prepared to furnish about 120,000 for each consumer, a year.

Q. Well, I want to know what the average consumption is per year for domestic purposes under normal conditions. Normal and usual conditions in a city of about 25,000 inhabitants.

A. It would depend upon the price.

Q. Suppose you had about 3,500 connections, or customers.

A. It still would depend upon the price.

317 Q. Give us your estimate and the price that governs your estimate.

A. At eighteen cents, it would take a good deal more than at thirty cents.

Q. You would get more customers at a lower rate, wouldn't you?

A. Yes, sir. But they would burn more gas, and it is valuable.

Q. You cannot make any estimate of the amount of yearly con-

sumption of a city of that size? What would it be at eighteen cents in your opinion?

A. Figuring it at twenty cents a thousand, you would probably be safe in putting it at about thirty dollars per year per consumer.

Q. How much gas is that, figured out?

A. That would be about 150,000 per consumer. They would burn more with a lower rate than with a higher rate.

Q. Well, I am after the total amount, if you can do the multiplying.

A. That would be about 150,000 per consumer.

Q. What would that total in a city of that size?

A. You would have to give me a piece of paper and a pencil.

By Edward Kibler: Mr. Bailiff, give him some paper and a pencil.

(The Bailiff does as requested.)

A. About 150,000 per consumer.

Q. And 3,500 consumers?

A. I wish someone else would figure it.

Q. Well, I cannot cipher, and I despise anybody that can.

A. Well, I am under that ban then.

Q. Well, I didn't know that you could.

The Court: Proceed.

318 A. About 525,000,000.

Q. What has been the capacity for the last ten years of this Homer field?

A. I couldn't tell you.

Q. Do you know how many towns of the size of Newark, under normal conditions, that field would have supplied?

A. No, sir, I couldn't tell you.

Q. Can you give any idea?

A. No, sir, I can't.

Q. Do you know the number of people that you supply?

A. We have about 135,000 consumers.

Q. In the 98 towns?

A. Yes, sir.

Q. That does not include the wholesale, does it?

A. No, sir. Our domestic consumers.

Q. And they have all been supplied from this field?

A. Oh, no.

Q. Do you know how many have been supplied from this field by your company?

A. No, I couldn't say accurately.

Q. Well, approximately.

A. I would say about 75,000.

Q. For how long?

A. We have been furnishing gas to the larger number of these towns for probably eight years, but there has been an increase in all of them, of course, but it would be hard to answer that question as to the exact amount.

Q. What is the capital stock of your company—the Ohio Fuel Supply Company?
A. $15,000,000.
Q. Is it all issued?
A. Practically all.
Q. How many wells have you?
A. I don't know that.
Q. You operate in the Ashland, in the Licking, and in the Sugar Grove fields?
A. Yes, sir.
319 Q. Is there any other?
A. Well, we get local gas from different places; near Gethesda and Barnsville and Cambridge and Corning.
Q. I understand that you didn't get anything from that territory.
A. We are not relying entirely on the local gas. We still get some local gas there.
Q. Do you know what the annual total production of your company is?
A. No, sir, I couldn't give it in detail.
Q. Do you supply gas to the Logan Company at any other point except Sugar Grove?
A. No, sir.
Q. Do you know what amount you supply that company?
A. No, sir.
Q. Do you know about how much?
A. No, sir.
Q. Do you know how long you have been supplying it?
A. I think the connection was made down there about two years ago.
Q. How long have you been supplying them?
A. About two years.
Q. And that is the first that you supplied to the Logan Company.
A. That is the first that we supplied to them, outside of sometimes they might have had a little trouble and we would try to help them out; and we would work back and forth.
Q. Sort of corporate flirtations.
A. Yes, sir.
Q. Is the price that you gave us—the same price during the two years that you sold them—was the price during all that time?
A. I think that is the price fixed when the connection was made.
Q. And that is sixteen and one-third or sixteen and one-fourth?
A. Yes, sir.
320 Q. You don't know which?
A. No, sir.
Q. You don't know the amount that you are supplying them with at that figure?
A. No, sir.
Q. Have you given us all the instances of wholesale of natural gas by your company?
A. To the different towns and the other companies, yes, sir.
Q. At Middletown, you sell them?

A. Yes, sir.
Q. What is that distance to Newark?
A. Well, it is about eighty miles from Columbus.
Q. You deliver it there at wholesale for twenty-one cents?
A. Yes, sir.
Q. Did you ever have a different price than that with Middletown?
A. No, sir.
Q. How long have you been furnishing gas at that price?
A. About five years.
Q. And that is under contract, is it?
A. Yes, sir, it is.
Q. And at Hamilton, you are delivering it to the city at twenty cents?
A. Yes, sir. We are selling it to the city. There are two gas companies there. There is a concern that sells some gas there.
Q. That is furnished under a contract?
A. Yes, sir.
Q. How long have you furnished it to Hamilton Ohio at twenty cents?
A. About four years.
Q. What distance is that from Columbus?
A. It is about one hundred miles from Columbus.
Q. What distance is Cincinnati from Columbus?
A. Our pipe line is 114 miles from Columbus to Cincinnati.
321 Q. How long have you supplied gas at wholesale to Springfield?
A. A little over five years.
Q. Did you always get that same price that you mentioned?
A. No, sir.
Q. What was the former price? When did it change?
A. The former price was eighteen cents.
Q. And that was during the first five years?
A. No, sir, that was about the first year or two that we were there. And the rate was raised in Springfield and our price was increased.
Q. Did it go to twenty-one cents?
A. Yes, sir, to twenty-one cents.
Q. You didn't furnish it at any lower price than twenty-one except during the time that you furnished it at eighteen cents?
A. No, sir.
Q. What is the distance to Springfield from Columbus?
A. About fifty miles.
Q. During the time that you sold gas in Columbus to factories, do you know the price that you obtained?
A. From ten to fifteen cents.
Q. Do you know what amount of gas you delivered at that figure to the factories?
A. No, sir, not off-hand.
Q. You cannot approximate it?
A. No, sir, I can't.

Q. How long have you been furnishing gas at wholesale to factories at Columbus?

A. About eight years.

Q. In reference to the ten and fifteen cent rate—are you selling any at ten cents now?

A. No, sir.

Q. Do you make contracts to deliver gas to these factories?

A. Yes, sir.

Q. And meter it to each factory?

A. Yes sir. But not at fifteen cents.

322 Q. What is the lowest that you are selling any gas to any factory there for?

A. We charge them thirty cents a thousand for the first 100,000 feet, in order to avoid discrimination; and twenty-two cents for the next 100,000 and eighteen cents for the next 300,000, and fifteen cents for all over that. It would be hard to name the figure, because they vary as to the amount they burn.

Q. Well, that is the schedule of prices?

A. Yes, sir. Our contracts are all covered by that schedule.

Q. Do you know how many miles of pipe your company has altogether?

A. I believe our last inventory showed something over twenty-two hundred miles.

Q. Is that all in the State of Ohio?

A. Yes, sir.

Q. You have a pipe line to the Ohio River?

A. Yes, sir.

Q. What is the size of that line?

A. Eighteen inches.

Q. Where does it extend to?

A. To Sugar Grove, and it is connected up there with a line to Columbus and one leading into the Cincinnati line and also the Toledo line.

Q. It is the line that supplies Toledo?

A. Yes, sir. But not this line. We have another line——

Q. Well, I mean your company?

A. Yes, sir.

Q. What is the size of the pipe?

A. A few miles of ten inch, and then two inch; a ten inch to Delaware, and then two ten inch lines, and a boosting station about thirty-five miles this side of Toledo.

Q. How long have you supplied Toledo?

A. About two years.

323 Q. As I understand, up until the time you connected with the West Virginia field, you supplied all your territory gas from the Ashland, Licking, and Sugar Grove fields?

A. Yes, sir.

Q. What proportion of the total amount of the gas from those three fields has come from the Licking County field?

A. Now?

Q. Well, you will have to fix some time in order to determine

that. During the life of this field, since your occupation of it, how much of the gas that you sold has come from that field, approximately?

A. That would be a hard question to answer. Until we connected with the West Virginia field, I presume that 90% of the gas came from the Knox-Licking field.

Q. When did you make that connection with the West Virginia field?

A. That line was completed about three years ago.

Q. Your line?

A. Yes, sir.

Q. Have you any wells in West Virginia?

A. No, sir.

Q. Do you know how the Licking field compares with the other two fields in proportion to the number of well- that are now producing?

A. No, sir.

Q. You don't know that?

A. No, sir. Not to my personal knowledge.

Q. How does the Ashland field compare with the Licking field?

A. From what I can hear our fieldmen say, it does not compare very favorably.

Q. The Sugar Grove field has been very much exhausted for sometime?

A. Yes, sir.

324 Q. And so, the Licking County field has been the principal source of your supply, and is yet, of the natural gas that you have disposed of.

A. No, sir. We don't look upon Licking County as being the principal source.

Q. You say you only got gas from there for three years?

A. Yes, sir.

Q. And now you get about one-third of it from there.

A. We take about one-third, but we are privileged to call on them for any amount we want in excess of that.

Q. Well, up until three years ago, the Licking field was your chief source of supply?

A. Yes, sir. It was.

Q. During the three years that you have taken from West Virginia, what proportion of the amount consumed did you obtain from that source?

A. I couldn't answer that.

Q. You say that you aimed to take one-third of your entire supply from West Virginia?

A. Yes, sir.

Q. How much of an extension of your business has resulted from your connection with the West Virginia field? How much expansion of your business?

A. I don't know as the expansion has been so great, but we have been in a position to take care of our customers very much better, and have a greater supply of gas than we had before that was done.

Q. Toledo resulted from that connection?

A. No, sir, they get their supply from another West Virginia line. Not from this one entirely. Not through our line, but through a line that we are jointly interested in.

Q. You supply the gas in Cincinnati.

A. About one third of it in Cincinnati.

325 Q. And in Hamilton.

A. We supply what the city takes. There are two companies there. I don't know about the division there.

Q. In cold weather, it requires what you call the peak-load to supply the consumers?

A. Yes, sir.

Q. There has been very little of that this winter?

A. Not very much until in February.

Q. What temperature is it that requires that peak-load, as you call it?

A. Probably you know that as well as I do. It is not the lowest temperature that always requires the most gas. It depends upon the weather conditions. A cold damp day, with the thermometer at 26 or 27, they will burn very near as much gas as they will down to fifteen; and it is hard to tell when the peak load would come. We would consider ten degrees above zero as pretty cold weather.

Q. Your company is the largest in this territory, isn't it?

A. Well, I don't want to take any honors from the other fellows. It is hardly fair.

Q. Well, it is the amount of business that it does and the towns that it supplies. and the amount of gas that it disposes of, isn't it?

A. How is that?

Q. In the amount of business that it does and the towns that it supplies, and its mileage and its pipe lines and the amount of its capitalization.

A. I think we are the largest distributors in the State, yes, sir.

Q. Do you sell gas wholesale to any other producing or distributing company besides the Logan Company?

A. We have sometimes sold emergency gas.

Q. Well, I don't mean that?

A. No, sir.

326 Q. This Mohican Company that you spoke of—you supply them?

A. Yes, sir.

Q. Where are they located? Are they located in Knox County?

A. They supply Akron and in that section of the country.

Q. Where is their principal office?

A. I think it is in Pittsburgh.

Q. Are you under contract with them?

A. Yes, sir.

Q. What is the price that you get from them?

A. Fifteen cents.

Q. How long has it been at that rate?

A. We have been supplying them since last fall.

Q. You made your contract then?

A. It is not a contract that cannot be terminated in a very short time. It is not a long-time contract. We are just taking care of them temporarily.

Q. You made it last fall?

A. Yes, sir.

Q. And you are still supplying them gas at that rate?

A. Yes, sir.

The Court: We will take a short intermission now.

(Here the court took a recess.)

JOHN M. GERARD.

Redirect examination.

Examined by Judge S. M. Douglass:

Q. Mr. Gerard, your attention was called to the price made to industrial companies as against the domestic consumers. What
327 are the characteristics as to the manufacturing rates, and the service, as compared with the domestic?

A. I believe that I said that the rate had been from ten to fifteen cents. In the early stages, we sold gas at ten cents a thousand; but for the last four years, we have been getting fifteen cents straight; sixteen cents, with a discount of one cent, making fifteen cents net. The Utility Commission thought that we were discriminating against the domestic consumer, and they insisted that we should charge all industrial consumers the same price that we charged domestic consumers, up to a certain amount; and they also suggested, and I believe they insisted, that we should have two rates—what is the word—

By Mr. Krick: Preferred.

A. Yes, sir, preferred, and non-preferred. I ought to have known it, but I couldn't just remember it. Preferred, and non-preferred consumers. They took the position that a preferred consumer was one who would come and say: I want your gas, and I am willing to pay you thirty cents a thousand for it. They claimed that we must furnish that man gas even though he was burning it in a boiler, and he would have to pay the thirty cent net rate. The nonpreferred class was the class that I spoke of awhile ago, and we got thirty cents for the first 100,000 cubic feet, and twenty-two cents for the next 100,000 cubic feet, eighteen cents for the next 300,000 and fifteen cents for all over that. That contract gives us the privilege of discontinuing the service without any notice whatever. That is why they insisted on us classifying them as the preferred and the non-preferred consumers.

328 Q. That is, they are of great value to you because of the large consumption?

A. Yes, sir.

Q. It that a standard contract that you use for all industries?

A. We are using that contract in all the towns in which we have any industrial consumers of any amount. The idea of the industrial trade is the fact that we sell gas to them in the summer as we do in

the winter. They take practically the same amount in the summer as in the winter, and they take the gas—for instance, the domestic gas, which we sell in the winter—a great deal of it is taken care of in the summer by the industrial business.

Q. Have you a market for all of your gas?

A. Yes, sir.

Q. Along the line which is laid in Cincinnati—along the route of that line, and closely adjoining it, you have a large number of towns?

A. Yes, sir.

Q. Are most of the towns down there supplied directly from that eighteen inch line, in the direction of Cincinnati—southward?

A. Yes, sir. All of the towns adjacent to that line except Dayton. They have a line from Sugar Grove.

Q. And you do not supply Dayton at wholesale?

A. No, sir, we haven't anything to do with Dayton.

By Judge Douglass: That is all.

329 M. E. LYTLE, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. Your name is M. E. Lytle?

A. Yes, sir, it is.

Q. Where do you live, Mr. Lytle?

A. I live at Mt. Vernon.

Q. What business are you engaged in?

A. I am in the gas business.

Q. How long have you been in that business?

A. For thirty-four years.

Q. What company have you been connected with during that time?

A. The Carter Gas Company, the Standard Gas Company, the Forest Oil and Gas Company, and the Ohio Fuel Supply Company.

Q. How long have you been connected with the Ohio Fuel Supply Company,

A. For eleven years the 16th of this coming July.

Q. What official position do you hold with that company?

A. General superintendent of their gas and oil business in the State of Ohio.

Q. How long have you held that position with the Ohio Fuel Supply Company?

A. As general superintendent, eighteen months.

Q. Previous to that time, what was your position with the company?

A. It was practically the same only not the same name.

330 Q. How long did you perform the duties of general superintendent of the company? For what period of time?

A. For eleven years. That is, in the State of Ohio.

Q. Where did the Ohio Fuel Supply Company first begin operations in Ohio?

A. I commenced with them in Licking and Knox Counties.

Q. Do you know anything about their operations in the Sugar Grove field?

A. I do not.

Q. When did they begin operating in the Licking-Knox field?

A. I cannot say exactly.

Q. About what year was it?

A. It was about 1902.

Q. Had they done much operating before that time?

A. No, sir, not in that field.

Q. Are you prepared to say how many wells have been drilled by your company in the last eleven years in the Licking-Knox field?

A. In the neighborhood of—I can give it to you.

Q. Well, if you have the data, just refresh your recollection from it. (Witness gets memorandum.)

A. In the neighborhood of 565 wells.

Q. How many of those were dry holes?

A. Fifty-five.

Q. How many?

A. Fifty-five.

Q. How many of those wells have been abandoned?

A. One hundred and ten.

Q. And the balance, we understand, are active wells?

A. They are working, yes, sir.

Q. In what township in the Licking-Knox field has the Ohio Fuel Supply Company been operating?

A. Harrison, Morgan, Clay——

331 Q. Well, first, in Licking County?

A. Burlington, Bennington, Liberty, St. Albans, Union, Walnut, Fairfield.

By Edward Kibler: You don't mean that Walnut is a township in Licking County.

A. No, sir. And Thorn.

By Edward Kibler: That is in Perry County?

A. Yes, sir. Washington and Eden. I think that is all.

Q. And the townships adjoining the Licking County line, in Knox County, you have been operating in?

A. Yes, sir.

Q. When you first began operating in this field, what was your initial rock pressure?

A. It varied from 750 to 810 pounds.

Q. What was the cause of varying in the rock pressure?

A. I am not able to state, more than about the east side of the field in Harrison, Morgan and Clay Townships. It seems to be a little higher pressure than in the west and south part of the field.

Q. What is the rock pressure at this point in that field?

A. It would be impossible to give an accurate estimate. In some places it is 125, and other places it is higher.

Q. State what is the average rock pressure in the field?

A. As near as I have been able to gather it, it is about 125 pounds.

Q. I wish you would state to the court how, in volume, the supply of these wells—those drilled in now, compare with those

332 drilled in at the beginning of operations in the field?

A. We have drilled in wells which had a flow of anywhere from five to eight million feet. Probably these wells are doing from fifty to seventy thousand today.

Q. When did you drill in those wells?

A. Some in 1902 and some in 1903.

Q. Some of the wells that were drilled in in 1902 and 1903, are still producing gas, are they

A. Yes, sir.

Q. About what proportion of the wells drilled in then—in that early period—are now active wells?

A. Well, they vary. You may have bad luck with a well drilled in last year; and a well drilled ten years ago may be in good condition. I could not estimate the life of a well scarcely in that way.

Q. What is the average open flow of the wells drilled in at this time in that field?

A. Our experience has been in the past year, about 750,000. That is an average.

Q. Is that the initial open flow?

A. Of the wells drilled in this year?

Q. Yes, sir.

A. Yes, sir, that is very close to the average.

Q. State to the court how long that initial flow would hold up in the average of wells drilled?

A. That would vary considerably in different localities. The sand is deeper and thicker and lasts longer than in other places. The deeper the sand, the more lasting the flow.

Q. I wish you would state to the court just how long that initial flow would hold up in the average well?

A. As the well was when it was drilled in?

333 Q. Yes, sir.

A. If the well is drawn hard, it depreciates very fast.

Q. What per cent?

A. I am not stating in every case, because I am not able to determine that, as I have not gauged every well; but we have had wells drilled that were 8,000,000, and in two months' time they were down to 954,000.

Q. What is the cost of drilling a well in that territory? To what depth have you to go?

A. The average in this field is about 2250 feet. From that to 2300. That would be the average depth.

Q. You mean around Burlington Townships and those townships there?

A. Yes, sir.

Q. What is the average cost of drilling a well in that field?

A. From $3800 to $4000.

Q. Do you mean the cost today?

A. Yes, sir.

Q. How does that compare with the cost in 1902 and 1905—ten and seven years ago?

A. There is some difference. During those years, certain contractors who worked for us got a little more in 1902 and 1903 per foot for drilling than at the present time. But there is not a great deal of difference. The bill for drilling a well is a little larger than it was at that time.

Q. I will ask you whether there is any difference in the depth of the wells drilled now and in the early history of this field?

A. I think in this field the wells are deeper than the Sugar Grove field.

Q. Well, no, I am referring to the Licking-Knox field. That is, whether the wells drilled this year and last year are any deeper than the wells drilled in 1902 and 1903, where you have
334 been operating in the last year or two?

A. The wells are deeper. We have been operating more in the northeast part of the field.

Q. As you go in certain directions, do you have to go deeper?

A. Yes, sir.

Q. Where have you been making the developments?

A. In Howard and Harrison Townships, Knox County.

Q. Is that any deeper sand or shallower than in the early history?

A. It is a little thicker than further southwest.

Q. How does the depth of the wells compare in those townships with the depth in the old field?

A. The wells there are deeper.

Q. About how much deeper?

A. In certain localities about 250 to 300 feet deeper. It depends upon the surface of the ground considerably. It is more mountainous.

Q. What is the cost of the upkeep of a well now as compared with three or four years ago?

A. Some wells cost more than others. Where we are drilling now, you may put in twenty-five or twenty-six or twenty-seven hundred feet of casing, to close off the salt water.

Q. When are you first likely to get the salt water in a well?

A. In the lime. About 125 to 135 feet above the gas producing sand.

Q. How does the cost of keeping up and maintaining a well with a low or small rock pressure, compare with the cost of keeping up and maintaining a well with a large or high rock pressure?

A. It is generally a little more.

Q. Why?

A. Because it requires assistance from the outside, which the big wells will take care of itself; such as bailing and swab-
335 bing. It requires more labor to take care of it when it is smaller. The salt accumulates faster and you have to swab it many times to get the water out, and the well becomes so weak that it will not throw out the water.

Q. How much more does it cost to maintain a well with a low rock pressure than with a higher pressure?

A. They cost much more than they did years ago when they were flowing the water out themselves.

Q. What would be the effect of turning a well with a low rock pressure into a main having a higher pressure than the well itself had?

A. It would be more likely to destroy the well.

Q. How?

A. Because the flow of gas back in would drive the water back, and the water would drive the gas back; and water is very detrimental to either gas or oil.

Q. I will ask you if it is not a fact that in order to use the product of a well having low rock pressure, you must maintain the pressure in your lines at an equal or a lower pressure than the well itself has?

A. Yes, sir.

Q. What effect has that upon the efficiency of the larger wells?

A. You have to use the well with a low pressure separate, or overcome the trouble with pumps.

Q. What do you regard as low pressure wells?

A. Forty or fifty pounds.

Q. I would like to know the percentage of those, as compared with all the wells that you have in the field?

A. All that we have are not high pressure.

Q. About how many are there; the wells that you are using now?

A. About four hundred.

336 Q. About four hundred?

A. Yes, sir.

Q. Are you able to say about the quantity of acreage carried by your company in what is known as the Licking Knox field?

A. Not positively. Probably about five or six hundred thousand acres.

Q. How many?

A. About five or six hundred thousand acres.

Q. Do you know about the average rental value per acre of the leases?

A. No, sir.

Q. The royalty is the same? About two hundred dollars, I suppose?

A. Two hundred dollars and two hundred and twenty-five dollars. There is some difference in the leases.

Q. Do you know the annual depreciation in volume of your wells—do you know what that is?

A. For the past year?

Q. Yes, sir.

A. I can give it only for 1912.

Q. About how much in that year?

A. About one hundred million in this field.

Q. What year does that cover?

A. The pressure was taken last April. But it would probably be called the 1911 year.

Q. What mains are being operated out of that field?

A. By our people, do you mean?
Q. By your people, and by other companies?
A. We have a twelve inch line to Columbus, O. D.
Q. What do you mean by the letters O. D.?
A. That means outside diameter.

337 By Edward Kibler:

Q. Did you say fourteen inches?
A. No, sir, twelve inches. And eighteen inches, outside diameter, Cincinnati. And eighteen inch I. D. to Zanesville; eighteen inch I. D. from Sugar Grove to Zanesville; and twelve inch I. D. from Sugar Grove to Columbus. And an eighteen inch from West Virginia into Ohio.
Q. Do you know what mains are used by other companies in the Sugar Grove as well as in the Licking and Knox field?
A. The Columbus Fuel Gas Company have a ten inch main running to Columbus.

By Edward Kibler:

Q. Is that the Columbus Gas and Fuel Company?
A. Yes, sir. The Columbus Gas and Fuel Company.
Q. Have they any other mains?
A. The Columbus Company has an eight inch main.
Q. What company is that?
A. It is known here as the Columbus, and in the Ashland district as the Medina Company.
Q. The Columbus Natural Gas have what?
A. An eight inch line.
Q. Do you know what the mains are of the Logan Company out of that field?
A. No, sir.
Q. Or the Everett Company?
A. No, sir.
Q. Or any of the other companies?
A. No, sir, I am not positive. I have a general idea, about them, but I am not familiar with their lines.
Q. From your knowledge of the operations going on in that field, at the present time, and from your knowledge of natural gas, I would like you to state to the court, if you have such an
338 opinion, what, in your judgment, is the probable life of this Licking-Knox field?
A. That would be very hard to determine. We are continuously getting new wells in districts where we never anticipated getting any gas at all. The field might last for ten years, or it might last for twenty years to a very small extent.
Q. Well, I mean to the extent that it is being drained at this time?
A. The depreciation of the field is wonderful in the past five years. We do not get any five and six million wells through this country that I know of at all; and, years ago, it was no trouble to go out and

drill certain localities and get them; the rock pressure is down; and today the field is of very little use, unless it is handled by pumps.

Q. Did you have to use the pumps formerly?

A. No, sir.

By J. R. Fitzgibbon: That is all.

M. E. LYTLE.

Cross-examination.

Examined by Mr. Roderic Jones:

Q. Mr. Lytle, I understand you to say that the wells in this Licking-Knox field vary as to rock pressure from about 750 to something over 800?

A. Yes, sir.

Q. And you said that it depended upon the location?

A. Yes, sir, I did.

Q. And that the wells drilled near the east extremity showed a higher rock pressure than those in the western extremity of the field?

A. Yes, sir.

339 Q. The development of the field was from the west to the east, wasn't it?

A. From the southwest to the east.

Q. And the development in recent years has been almost altogether in the eastern part of the field?

A. Our developments have been, in the past two years.

Q. You say that you drilled in two townships in Knox County in the last two years?

A. Yes, sir. And in other townships also.

Q. Did you drill in Eden Township in this County?

A. Yes, sir.

Q. And got the same results that you got immediately north in Knox County?

A. Two dry holes.

Q. The wells that your company has most recently drilled in this field are the ones that have developed the highest rock pressure?

A. No, sir. The highest was nine years ago.

Q. Where?

A. In Morgan Township. James B. Brown, No. 1.

Q. It is north of what township in Licking County? Washington, isn't it?

A. I think it is.

Q. I don't know. That is the reason I was asking you. It is the fact that as the field is drilled to the east, the rock pressure increases?

A. A rather higher pressure.

Q. You are drilling to the east now, and have been for two years?

A. Yes, sir. For five or six years, we have been drilling there.

Q. I understand you to say that all the wells operated by your company, amounting to about four hundred wells, in this field, are what you call low pressure?

A. Yes, sir.

340 Q. What do you call low pressure wells?

A. Wells which we have to use pumps on to get the gas.

Q. How much pressure do you get?

A. It varies.

Q. Didn't you testify that a well that did not develop over fifty pounds—didn't you testify that those are the ones that you called low pressure wells? Isn't that what you testified to?

A. I was talking about turning the line pressure into a low pressure well.

Q. Didn't you testify in direct examination that you classified wells that did not develop a rock pressure exceeding fifty pounds as low pressure wells?

A. Yes, sir, under those conditions. When you turn the line pressure in, it is a low pressure well.

Q. You wouldn't get any gas at all under those conditions?

A. No, sir.

Q. That is when you use pumps?

A. Yes, sir.

Q. What is a pump? Is it a compressing station?

A. Yes, sir.

Q. How many of those have you?

A. We have one large station, with a battery of eight engines.

Q. That is at Homer?

A. Yes, sir.

Q. Have you any more?

A. Yes, sir.

Q. Where?

A. At Sugar Grove.

Q. You have no more in this field?

A. No, sir.

Q. How long have you been using those pumps?

A. Nine years ago this summer their erection was commenced.

Q. How long have they been used?

A. About eight years.

Q. Do you say that the royalty is about $200 a well?

A. Yes, sir.

341 Q. Have you any wells that you are paying only $100 on?

A. I am not posted about that. I am not in the leasing department.

Q. You know what the well royalties are don't you?

A. No, sir, I couldn't state and give it as evidence.

Q. You say that the depreciation from April, 1911, to 1912, is one hundred million?

A. In this district.

Q. Do you mean that there was that much annual depreciation in your wells?

A. Yes, sir. I don't know anything about the other wells.

Q. What was the total production of you- wells in the year ending in April, 1911?

A. I couldn't give that. I am not in the distributing depart-

ment. The wells, as they are figured, are taken from the distributing end of the department.

Q. You don't know what it was in any year, do you?

A. I am not in the distributing department.

Q. How do you know that there was a depreciation of one hundred million in one year?

A. Simply because we took the pressure of the wells in the field.

Q. Your memory is clear on that subject, but entirely deficient as to the figures from which it was obtained?

A. Certainly. I did not carry the data in my head.

Q. Nobody thought to refresh or quicken your recollection as to your testimony in this case, in preparation for this trial, did they?

A. No, sir.

Q. You are still drilling in this territory?

A. No, sir, not at present.

Q. You did drill last year, did you not?

A. Yes, sir.

342 Q. How many wells?

A. We drilled twenty two wells, and twelve were dry holes.

Q. Where were they?

A. In Granville Township; Howard; Washington; Eden, and Pleasant.

Q. When you were drilling in those townships, you were not drilling towards the east, but you were drilling on the extreme west edge of the field?

A. Yes, sir. We drilled there.

By Roderic Jones: That is all.

By J. R. Fitzgibbon:

Q. Do you know what that compressor station cost at Homer—that compressor station of yours at Homer?

A. No, sir, I don't.

By J. R. Fitzgibbon: That is all.

D. W. WALLACE, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Chas. W. Montgomery:

Q. What is your business?

A. I am in the gas business.

Q. Where do you reside?

A. I live in Columbus.

Q. With what Company are you associated?

A. The Buckeye State Gas & Fuel Company.

Q. How long have you been in the business?

A. For about 12 years.

343 Q. How long have you been connected with the Buckeye Company?

A. About eight years.
Q. In what capacity are you employed?
A. As Superintendent.
Q. With what company were you connected before that?
A. The Utica Gas, Oil and Mining Company.
Q. Are you connected with any company other than the Buckeye Company at present?
A. No, sir.
Q. In your duties as Superintendent, you do what?
A. I have charge of the field operations generally.
Q. How many wells has the Buckeye Company drilled in the Knox-Licking field during the time that you have been connected with the company?
A. Forty-one.
Q. Over what area? What Townships?
A. Morgan, Washington, Eden and Clay.
Q. Four townships?
A. Yes, sir.
Q. Two in Knox County and two in Licking County?
A. Yes, sir.
Q. How many wells did you say?
A. Forty wells.
Q. How many dry holes?
A. Six dry holes.
Q. Have any of the remaining 35 wells been abandoned?
A. Yes, sir, seven of them.
Q. In what years did you drill the 41 wells? Did it extend over the whole period of time?
A. Yes, sir, it did.
Q. When you began drilling, what was the rock pressure?
A. From 700 to——
Q. (Interrupting.) Well, when you began to drill eight years ago it was what?
A. The field had been drawn on some.
344 Q. What was the average rock pressure which you found when you began to drill about eight years ago?
A. About 700.
Q. What is it now?
A. 140.
Q. What do you do with your gas? Do you furnish your gas to the consumers, or sell it at wholesale?
A. Both.
Q. What, in a general way, is the effect upon the wells of the low pressure?
A. They do not produce so much.
Q. Do you know at what ratio the rock pressure has diminished during these years? In other words, when is it the greatest?
A. The first few years.
Q. Will you explain why the diminution of the rock pressure

during the later years of the life of a well is less than during the first years?

A. On account of the density of the gas. As the density becomes less, the flow becomes less.

Q. Are you familiar with the cost of taking care of wells at the present time?

A. Yes, sir.

Q. How does the cost compare with cost at the time when you began to drill in this territory?

A. Well, it is much more.

Q. Why is it much more?

A. The wells are constantly giving us trouble with water and sale, and they have to be visited more often; and we have to have improved machinery to clean them out; and there are more men working.

Q. What have you to say about the yield from those wells in that condition, as compared with prior to that time? That is, do you know how the decrease in the yield compares with the decrease in the rock pressure?

A. It gradually goes down together.

345 Q. Have you anything to do with the distribution of gas?

A. Well, very little.

Q. Did you have anything to do with the Sugar Grove field?

A. No, sir.

Q. Or the Ashland field?

A. No, sir.

Q. You had nothing to do with that?

A. No, sir.

By Mr. Montgomery: You may cross-examine.

D. W. WALLACE,

Cross-examination.

Examined by Edward Kibler:

Q. The Buckeye State Gas & Fuel Company is the name of the company that you are connected with, is it?

A. Yes, sir.

Q. Now, that belongs to the Union Gas Company, at Pittsburgh, doesn't it?

A. It belonged to the Pittsburgh Oil and Gas Company at one time. It now belongs to the Daugherty Operating Company, of New York.

Q. It has gotten away from the Pittsburgh aggregation has it?

A. Yes, sir.

Q. It was the Union Gas Company, or Corporation, that it belonged to formerly wasn't it?

A. No, sir.

Q. It was purchased by Barnsdahl at the same time that the Logan Company was purchased, wasn't it In about 1902?

A. It wasn't purchased, as I understand it. It was organized.
Q. Did you have any stock in it?
A. No, sir.
346 Q. Well, you don't know, then, do you? Didn't it go into the Union Gas Corporation of Pittsburgh, the same time that the Logan Company went into that corporation?
A. I never understood but what the parent company was the Pittsburgh Oil and Gas Company.
Q. Do you know who the directors of the Buckeye Company are? Who is the President?
A. Barnsdahl.
Q. Barnsdahl is the whole thing, isn't he? Inside and out. What other officers have you besides Barnsdahl?
A. I don't know that I can name them from memory.
Q. Who is the Treasurer?
A. Dan Robertson is the Treasurer.
Q. Who is the Secretary?
A. The same party.
Q. Who is the Vice President?
A. Well, I couldn't say.
Q. Who do you report to as Superintendent?
A. To the Secretary.
Q. At Pittsburgh?
A. Yes, sir, at Pittsburgh.
Q. Did you ever know that you had the same *onwer* as the Logan Natural Gas & Fuel Company?
A. No, sir.
Q. And you have been with them how long, did you say?
A. I would think it is about eight years.
Q. Where do you have your office?
A. At Utica.
Q. Is there a General Superintendent of the Company? Is there anybody between you and the corporate officers?
A. Well, I couldn't say as to that.
Q. From whom do you take your orders? As to your operations or your management and control of the affairs of the company?
A. Usually done through the Secretary of the Company.
347 Q. Who do you go to for instructions? To anybody in this territory?
A. No, sir.
Q. What distribution do you make of gas?
A. We sold it to the Coshocton Gas Company at the City limits.
Q. Do you do that now?
A. I think it is all one concern now.
Q. What do you mean?
A. Since it was purchased by the other company.
Q. Since it was purchased by your company, or the Coshocton Company?
A. Both were purchased.
Q. By what Company?
A. By the Daugherty Operating Company.

Q. When did that occur?
A. Some time in September, I believe.
Q. What price did your company get, furnished to Coshocton?
A. It was on a per cent basis. I think it was 70 and 30.
Q. Who got the 70?
A. The Buckeye Company got 70 and the Coshocton Company got 30.
Q. That is of the collections?
A. Yes, sir.
Q. Of the gross collections?
A. Yes, sir.
Q. Have you any idea as to about how much gas you delivered there?
A. No, sir.
Q. Wasn't it metered?
A. Yes, sir, it was.
Q. Didn't you know anything about the readings?
A. Nothing only in a general way.
Q. Weren't the reports made to you as Superintendent?
A. They were made to the Pittsburgh office.
Q. From where?
A. From Coshocton direct.
348 Q. Who read them?
A. They were read by the Coshocton Gas Company's employees.
Q. What proportion of your output did you deliver at Coshocton?
A. We delivered about all of our output there.
Q. What did they charge at Coshocton when you were delivering gas there?
A. 25 cents net.
Q. 25 cents net?
A. Yes, sir.
Q. Did you ever have any lower rate there?
A. I think not.
Q. Did they ever sell it for any less than 25 cents net?
A. Not to domestic consumers.
Q. About all your product went down there?
A. Yes, sir.
Q. And no one else competed with you there?
A. No, sir.
Q. You were without competition?
A. Yes, sir.
Q. How long have you furnished gas to Coshocton?
A. I think this is the tenth year the pipe line has been in.
Q. Your company built the pipe line to Coshocton, did it?
A. Yes, sir, it did.
Q. And delivered it to the city limits?
A. Yes, sir, to the city limits.
Q. What sort of a line was that?
A. Do you mean the size of it?
Q. Yes, sir, the size of it.

A. A six inch line.
Q. How long is it?
A. Thirty-three miles long.
Q. What other disposition did you make of your product besides Coshocton, if any?
A. Three other small villages.
349 Q. Which you supply gas to?
A. Yes, sir.
Q. What are they?
A. Blandensburg, and Warsaw and West Bedford.
Q. Warsaw is in Coshocton County?
A. Yes, sir, it is.
Q. Where is West Bedford?
A. In Coshocton County.
Q. Blandensburg is in Knox County?
A. Yes, sir.
Q. Your own the pipe lines in the villages and to the villages do you.
A. Yes, sir.
Q. What do you get from the villages?
A. 25 cents net.
Q. How long have you got that price
A. Ever since the plant was put in.
Q. How long ago?
A. About 6 or 7 years.
Q. How many miles of pipe line have you altogether?
A. I don't know exactly how many miles.
Q. Including what you have in the villages.
A. I don't know exactly.
Q. Can't you give an estimate of it?
A. About ten miles in addition to the pipe line.
Q. How many do you say altogether?
A. About 43 miles.
Q. About 43 miles?
A. Yes, sir.
Q. How many wells have you in operation now?
A. In the Knox-Licking County field?
Q. Yes, sir, or any other field.
A. Forty-nine wells.
Q. Are they all in this field? In what is called the Knox-Licking field?
A. No, sir.
350 Q. What other wells have you?
A. We have a few wells in Coshocton county.
Q. Are they producing wells?
A. Yes, sir.
Q. How many have you?
A. We have 22.
Q. In Coshocton county?
A. Yes, sir, in Coshocton county.
Q. What depth did you have to go down there to get gas?

A. About 800 feet.
Q. 800 feet?
A. Yes, sir, it is shallow.
Q. Do you strike the Clinton sand at that depth?
A. The Berea.
Q. What rock pressure have you in those wells?
A. The initial rock pressure in the Coshocton county wells was 380 pounds.
Q. What is the ultimate pressure? Up to the present time.
A. We only take them about once a year.
Q. What was your last test?
A. About 150 pounds.
Q. How much do you get out of the 22 wells in Coshocton county? Do you know?
A. No, sir, I don't know that.
Q. You don't know how they produce, as compared with the other wells?
A. No, sir, I don't know that.
Q. Are all the Coshocton county wells about that depth?
A. All except one.
Q. What depth is that?
A. 3200 feet.
Q. And you went to the Clinton rock there, did you?
A. Yes, sir.
Q. Do you know of any wells outside of that territory that have produced gas at any such depth as that, in this vicinity, or field? 800 feet.

A. No, sir, I don't know of any others.

351 Q. Is any other part of Coshocton county developed than the part that you have your 22 wells in? For gas?
A. Not very much that I know of.
Q. You say that about 150 is your present rock pressure.
A. Yes, sir.
Q. What is it in this county and Knox county?
A. It would vary somewhat in the different townships.
Q. Well, what is the highest rock pressure that you had in any well at your last test?

(The witness gets memorandum.)

A. About 510 pounds.
Q. What was the lowest? Or, give the average, if you have it. In the Licking-Knox field.
A. Our average in 1912—in March, 1912—was 238 pounds.
Q. Read the test that you have there. You have only 27 wells in this territory.
A. Yes, sir.
Q. Read them.
A. D. B. Elliott No. 1, 140 pounds.
Q. That is last March?
A. Yes, sir.
Q. In March, 1912?

A. Yes, sir, 1912. Do you want the open flow?
Q. Just the rock pressure.
A. D. B. Elliott No. 2, 140; C. E. Campbell, 145; C. M. McClelland No. 1, 225, No. 2, 300, No. 3, 320; L. A. Bell——
Q. Where is that?
A. Those that I have read are all in Morgan Township.
Q. In Knox county?
A. Yes, sir, Knox county L. A. Bell in Washington Township, 235; No. 2, 240; No. 3, 175; No. 4, 350.
Q. Is that Bell?
A. Yes, sir. B. S. Hull, in the same township, 220; W. I. Evers, same township, 450; Anna Bell Jewell, in the same township,
352 510; E. L. Harris, 400, in the same township; Woodruff Brothers, in the same township, 460; B. B. Mitchell, Clay Township, 155——
Q. (Interrupting.) Well, that is enough for that. I wish you would take the Washington Township wells, and give us the average rock pressure in that group of wells. I assume that you are handy at figures. (The witness figur-s.)
A. 336.
Q. 336 was the average rock pressure in the last test that you made.
A. Yes, sir.
Q. Now, read what the pressure was on the wells in Eden Township.
A. C. W. Woodruff, 175; that is No. 1; No. 2, 160; No. 3, 140; U. F. Jones, 150; U. F. Jones No. 4, 140; and No. 5, 165.
Q. Those are in Eden Township?
A. Yes, sir.
Q. And about 150 would be the average of that group of wells?
A. I think so, yes, sir.
Q. Do you deliver this gas to Coshocton without the aid of any pump or compression station?
A. Yes, sir.
Q. Have you drilled any wells in Washington Township in the last year?
A. Yes, sir.
Q. What was the result of your efforts in that line?
A. We got pretty fair wells.
Q. Were there any dry holes?
A. No, sir.
Q. What was the rock pressure initially in the wells that you drilled in 1912 in Washington Township?
A. E. L. Harris No. 2, 550 pounds.
Q. That is one well?
A. Yes, sir. Mattie Woodruff No. 1, the same—550
353 pounds.
Q. 550 pounds?
A. Yes, sir, 550 pounds. We have completed two wells this year.
Q. With what success?
A. About the same rock pressure.

Q. 550 pounds?
A. Yes, sir.
Q. There were four wells drilled in Washington Township in a little over a year that averaged about 550 pounds' rocks pressure.
A. Yes, sir. This block of territory is sort of protected; it is sort of in the center.
Q. Well, it shows that there is gas there if you can find it.
A. Yes, sir.
Q. What is the acreage of your company?
A. About 2,000 acres.
Q. Have you some 50 cent land in that?
A. No, sir.
Q. What is it?
A. $5 to $7.50.
Q. Is the cheapest that you have $5?
A. Yes, sir.
Q. Of the two thousand acres?
A. Yes, sir.
Q. You pay $5 an acre?
A. Yes, sir, to start with.
Q. And $200 a well?
A. Yes, sir.
Q. What do you pay in order to take care of a well?
A. I couldn't say how much a well.
Q. Is it over $5 a month?
A. Yes, sir, I think it is a little more than that. About six or seven dollars.
Q. $6 or $7?
A. Yes, sir.

By Edward Kibler: That is all.

354 D. W. WALLACE:

Cross-examination.

Examined by Chas. W. Montgomery:

Q. These wells in which the rock pressure exceeds 500 pounds, were drilled when?
A. The last part of last year, in December; and the first part of this year.
Q. Within the last 2 or 3 months?
A. Yes, sir.
Q. These wells which you have, in which this rock pressure exceeds 400 pounds, were drilled when?
A. Well, the year before.
Q. And the wells in which the rock pressure is 300, were drilled when?
A. I presume the year before. I have two here; one was drilled in March, in Eden Township—no, I am mistaken about that; in August, 1905; the rock pressure was 620; the volume—well, that

is Morgan Township—I beg pardon—volume 5,500,000. March, 1912, rock pressure 140 volume 152,830.

Q. Did you take any other well?

A. Yes, sir, one more; Jones well No. 4, Eden Township, Licking County; completed Feb. 4, 1910, rock pressure 580 pounds; open flow two million; in March, 1912, the rock pressure was 140; open flow 55,340, and the well was abandoned on June 19th.

Q. I will ask you how these two wells compare with your wells generally—whether they are average wells, or otherwise.

By Edward Kibler: I object to that.

The Court: He may answer.

355 By Edward Kibler: I wish an exception.

By Mr. Montgomery: Read the question.

(The stenographer read the question.)

A. I took these two instances—the first one was about the extreme as to a good well; what we would call a good well, and the last one an extreme as to a poor one; being exhausted quickly.

Q. What did you mean when you said that this was protected territory?

A. We had leased it in a block. We originally drilled around the edge to keep the other fellows from getting the gas, and now we are drilling in the center of it. That block of territory has been shown to be hard sand, and the gas travels slowly, and consequently we have a little high pressure there on two or three small farms.

Q. What is the fact as to whether or not any drilling had been done in that territory before these wells were drilled?

A. No, sir, there hadn't been any drilling done there.

Q. Now, from your knowledge of this field, and its conditions, what have you to say as to the life of the field?

By Edward Kibler: I object to that; he is not qualified.

The Court: He may answer the question.

By Edward Kibler: Note an exception.

356 A. It is not possible to get it out fast like it is when the rock pressure is high, and I would only be guessing at it if I——

By Edward Kibler (interrupting): I will renew my objection.

The Court: The objection is sustained.

The Witness: Well, as to the life of the field, I don't think anybody can tell that. It might last five years and it might last three.

Q. What did you say about the ownership of this company of yours? By whom is it owned now?

A. By the Daugherty Operating Company.

Q. And Barnsdahl hasn't any present connection with it, has he?

A. No, sir, he hasn't.

By Mr. Montgomery: That is all.

D. W. WALLACE:

Recross-examination.

Examined by Edward Kibler:

Q. Mr. Barnsdahl did have some connection with it, didn't he?
A. Didn't I say that he was the President of it?
Q. Is he now?
A. No, sir, not now.
Q. Do you know who is?
A. No, sir, I don't know that.
Q. What is the total acreage that you have in that bunch in the center of which you say you are drilling?
A. I would say there are close to six hundred acres.
357 Q. You abandoned the well that showed 140 pounds rock pressure, did you?
A. Yes, sir.
Q. If it could have been pumped successfully, it would have lasted longer, wouldn't it?
A. The trouble was that the fellow on the other side of the fence was doing the pumping.
Q. He was draining it out?
A. Yes, sir.
Q. Then, it was not because the pressure got too low but there were other reasons for abandoning it.
A. It was because we couldn't get any gas from it.
Q. With 140 pounds rock pressure?
A. Very little.
Q. Is that so with your other wells that only showed 140 pounds rock pressure?
A. Practically so.

By Edward Kibler: That is all.
The Court: We will adjourn now.

(Here court adjourned to 9 o'clock a. m.)

Morning Session, 9 o'clock a. m.

HENRY COYLE, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. Your name is Henry Coyle?
A. Yes, sir.
Q. Where do you live, Mr. Coyle?
A. I live in Columbus, Ohio.
358 Q. What is your business?
A. I am working for the Logan Gas Company.
Q. What position do you hold with the Logan Gas Company?

A. I am General Superintendent of the field and lines.

By Edward Kibler: I don't understand the last part of your answer.

A. Of the field and lines.

By Edward Kibler: What Company?

A. The Logan Gas Company.

Q. How long have you held that position with the Logan Gas Company?

A. I have worked for them for 12 years.

Q. How long have you been engaged in the natural gas business?

A. About 22 or 23 years.

Q. In the last twelve years, in what field have you principally been engaged?

A. In the Homer and Licking field, and the Ashland.

Q. Do you know very much, of your own knowledge, about what is known as the Sugar Grove field?

A. No, sir, I don't; very little.

Q. What time was it when the Logan Company began developing in what is known as the North field, or Homer Licking field?

A. The first well was drilled about the time I came there; I think 12 years ago last July.

Q. Since that time, they have been operating in that field?

A. Yes, sir.

Q. During that time, how many wells have they drilled in the Knox-Licking field?

A. They have drilled and purchased 564 gas wells.

359 Q. How many of these wells have been dry holes?

A. Sixty.

Q. How many wells have been abandoned?

A. One hundred and sixty.

Q. In what Townships in this field has the Logan Company been drilling? In the Licking-Knox field?

A. We have drilled in Franklin Township, Licking County; and also in Licking Township; Union, Granville, St. Albans, Bennington, Burlington and Washington; and Mary Ann, I believe.

Q. And in what Townships in Knox County?

A. Milford, Miller, Morgan; I believe Eden is in Knox County.

Q. Eden Township is in Licking County.

By Edward Kibler: Eden is next to Mary Ann.

Q. Is there an Eden Township in Knox County?

A. No, sir, there isn't.

Q. What is the average depth of the wells in the Licking-Knox field?

A. I think about 2400 feet; perhaps 2500.

Q. How do the depths of the wells drilled at this time compare with the depth of the wells drilled in the earlier history of the field?

—. On the west side of the field, where we drilled first, the wells were shallower; about 2200 feet on the west side; as we went east, they got deeper, and as high as 2800 feet.

Q. What was the initial rock pressure of this field?

A. About 780 pounds.

Q. What is the rock pressure at present, in the wells of the Logan Gas Company?

A. Do you mean the average?

360 Q. Yes, sir, I mean the average.

—. About 150 pounds.

Q. What is the lowest rock pressure in the wells that are being used by the Logan Company?

A. About 50 pounds.

Q. How does the volume of gas compare in the wells drilled in recent years? By that, I mean in the years 1911 and 1912. How does it compare with those drilled in the early history of the field—in 1902, 1903, 1904 and 1905?

A. I wouldn't hardly know how to answer that. There was a material loss from the first ones we drilled, but to just know what the difference would be, I wouldn't be able to tell you.

Q. Do you know about what the average volume of wells drilled in at this time is?

A. Well, we drilled very few this last year. I wouldn't be able to answer that question definitely.

Q. What companies other than the Logan Gas Co. have been operating in the Knox Licking field?

A. The Ohio Fuel Supply Company; the Columbus Gas & Fuel Co., and some individual companies; Mr. Upham; the Buckeye Gas Company. Waight and Levering had some wells.

Q. And the Everett Company?

A. Yes, sir.

Q. Any others?

By Edward Kibler:

Q. The Utica Company?

A. Yes sir, the Utica Company.

Q. What mains have been constructed and are in operation from that field?

A. The Buckeye Gas Company has a line running to Coshocton.

Q. Do you know the size of it?

A. Six inches. The Columbus Gas & Fuel Company has a

361 ten inch line running to Columbus; I believe it is ten or twelve; I wouldn't be sure, but it is ten anyhow. The Ohio Fuel Supply Company has an eight — line running to Zanesville from there; and also a sixteen inch line running to Columbus, and towards Cincinnati; part of the way it is sixteen and part of the way it is eighteen. The Logan Company has a sixteen inch line running from there north to the north towns.

By Edward Kibler:

Q. To the north towns?

A. Yes, sir. We have a sixteen inch line which brings the gas to the pumping station.

Q. Where is that station?

A. It is at Bangs.

Q. Where is that?

A. About five miles from Mt. Vernon; along the C. A. & C. Railroad. In Knox County.

Q. What other mains are there?

A. Leading north, we have a twelve and ten inch line running to Mt. Gilead; and 16 from there north, about 40 miles.

Q. You say that you have a 12 inch and a 10 inch?

A. Yes, sir. A ten inch leading from the field to Newark.

Q. Do you know how many acres are under lease in that field to the Logan Company?

A. No, sir, I don't know that.

Q. Can you approximate it?

A. No, sir, I can't.

Q. Do you know the number of towns that are supplied from that field by the Logan Company, approximately; from this north field?

A. The gas is mingled with other gas, and it is hard to answer that definitely, but I think 7 or 8 towns.

Q. How many towns has the Logan Company that they supply with gas? Can you give that?

A. No, sir, I couldn't give that offhand.

362 Q. What was the initial cost of drilling a well in that field?

A. About $3,800 to $4,000.

Q. Has the price increased any? And, if so, in what way, and to what extent?

A. As we went further east, we encountered water, and it required a long string of casing, which added about $500 to each well.

Q. How does the cost of a low pressure well—that is, the cost of the upkeep—compare with the cost of a high pressure well?

A. I couldn't tell you the cost, but there is a very material difference. We have 37 men on our payroll in the Utica field, and 5 years ago we had 12 or 15. They are obliged to haul boilers around, and there is quite a good deal of difference between one that will take care of itself.

Q. What are the elements that make up the cost of keeping up a low pressure well which do not enter into a high pressure well?

A. A high pressure well will discharge its own water, and a man has just to open them for 10 or 15 minutes, and blow the water out. With a low pressure well, it won't blow the water out. Two men have to run a swab in and pull it out very slow, and it will take 3 or 4 hours at a well to get the water out.

Q. What line pressure is carried in your mains?

A. Do you mean in the field?

Q. Yes, sir.

A. That runs, an average pressure of about 20. In Eden Township, the field pressure is from 40 to 50.

Q. What effect has the line pressure in the mains on the low pressure wells?

A. If it exceeded the rock pressure, it would drown them out. It would kill them.

363 Q. How would it kill them?

A. I don't know; I couldn't explain it, but I know that it

does; it seems to corrode them, and in a few hours the well would be dead and not a particle of gas will come from it.

Q. Are you able to regenerate them?

A. By shooting them, we are able to do that sometimes.

Q. How much would the cost be to revive them?

A. About $18 a day, and you might put it in shape in 4 or 5 days, and another might take 30. Sometimes we have trouble in getting the tubing out; sometimes the casing leaks, and we have to put in new casing.

Q. I know that you stated that the cost has increased, but can you state the proportion of the cost of increase in maintaining and keeping up wells in that field now as compared with 5, or 6, or 7 years ago—the per cent?

A. I think it would cost three times as much, anyhow, now as formerly.

Q. About how much gas is obtained by the Logan Company from this Knox-Licking field a day?

A. I would only know approximately; I have no definite knowledge about it.

Q. Does your company take what is known as the open flow pressure?

A. No, sir. We take an open flow pressure when we first drill them in, but seldom after that.

Q. What is the volume of gas obtained by your company in that field, to the best of you- knowledge?

A. About twenty million feet a day.

Q. I wish you would explain to the court what the difficulties would be that would be met in supplying the city of Newark with gas from this Knox-Licking field by your company, if that could be done?

364 A. Yes, sir. By laying discharge lines from the pumping station at Bangs back to Patton's corners; we have a ten inch line that leads into Newark; about 14 miles long. It would require about 12 miles of pipe, and we could supply Newark by doing that.

Q. What effect would that have upon the wells in your field?

A. I- wouldn't have any different effect from what it has now.

Q. Do I understand, then, that it would be necessary to take the gas——

By Edward Kibler: I object. It is leading.

Q. To bring it to Newark, through what avenues would it have to go?

A. We would have to take the gas to the pumping station at Bangs.

Q. How far is that?

A. We have gathering lines which bring the gas to the pumping station, and we would have to have a line of about 12 miles to Patton's Corners.

Q. How large would that have to be?

A. A 10 inch line; the same size as we have in now.

Q. How many miles of mains and pipe have you in that field? In the Knox-Licking?

A. I wouldn't be able to tell you that.

Q. Do you know approximately how many?

A. No, sir, it would be only guesswork without counting it up, and I haven't done that.

Q. Into what different dimensions of pipe are these lines divided?

A. 16 inch, 12, 10, 8, 6, 4, 3 and 2.

Q. What dimensions of pipe are used in connecting the wells with the mains?

A. We run an eight inch line into Eden Township, 7 or 8 miles long, and a 3 inch line. It is owing to the amount
365 of gas that we have to come through the line.

Q. Do you know what the annual depreciation in volume of gas is in your wells?

A. No, sir. The engineers have worked that out. They have that.

Q. What effect upon the efficiency of high pressure wells has the receiving in the mains gas from a low pressure well?

By Edward Kibler: I object.

The Court: He may answer.

A. Do you mean the amount we would get out of a high pressure well and a low pressure?

Q. Yes, sir, what effect would one have upon the other, if they were turned into the same line?

A. Do you mean the amount of flow?

Q. Yes, sir. As to the efficiency of the high pressure well under those circumstances?

A. If you put a meter on, it will do pretty near fifty 50% of what the open flow would be; and we take a low pressure well down to 50 pounds, and running at 25 pounds line pressure, and the rock pressure 50, and turn that in, it won't do more than 15 or 18% of the amount of the open flow.

Q. If in any effort to get the total output of a field, all the wells in that field—the high pressure as well as the low pressure wells—would be turned into the mains, what effect would that have on the different wells?

A. We are using all the living wells we have. The high
366 pressure goes in against the low pressure, but we keep the pressure so low that it does not reach up to the rock pressure of the low pressure wells. All the gas is going that we have.

Q. What effect has that upon the efficiency of the high pressure wells?

A. The high pressure well discharges whatever gas it has to discharge. It brings the high pressure down on an equality. The low pressure well does not put in so much gas, but the high pressure well puts in considerably more gas.

By Edward Kibler:

Q. You overcome the effect of the low rock pressure by your compressors and pumping stations.
A. Yes, sir.

By Mr. J. R. Fitzgibbon:

Q. Do you know what the cost of those compressing stations is?
A. No, sir.

By Mr. Fitzgibbon: That is all.

HENRY COYLE.

Cross-examination.

Examined by Edward Kibler:

Q. To what extent does your pumping station supply what would be the equivalent of rock pressure to the wells?
A. It doesn't supply anything. It simply takes from.
Q. It reduces the resistance?
A. Yes, sir, it does.
Q. Is it a pumping process, or not?
A. As we have it, it flows from the well to the compressor station, and we raise the compression to meet our demands.
Q. Then it is not, strictly speaking, a pumping process at all. That is, there isn't any suction?
A. No, sir.
367 Q. The gas reaches the station by its own rock pressure, or by its own pressure, and the pressure is increased, and it is sent on?
A. Yes, sir.
Q. And you can get by this compression process about all the gas that is in the well?
A. Yes, sir, we can.
Q. What is the highest rock pressure of any well that you have now?
A. 325 pounds, in the Knox-Licking field.
Q. How old a well is it?
A. About four years old.
Q. Four years old?
A. Yes, sir, it is 3 or 4 years old. I wouldn't be sure about that.
Q. You don't use this pumping station to aid in the present supply of natural gas by your company to Newark, do you?
A. No, sir.
Q. The gas that comes in here from the Knox-Licking fields comes in under its own pressure?
A. In Licking Township and Granville and Union—some of that gas comes in here under its own pressure.
Q. Doesn't some of the gas that Newark uses come from the Logan Company?
A. Yes, sir.

Q. Don't you sell gas that comes here to Newark?
A. Yes, sir.
Q. Doesn't the gas that Newark is consuming now come in under the gas well pressure?
A. Yes, sir, from those Townships that I spoke of.
Q. You don't use your compressor for gas delivered south?
A. No, sir.
Q. It is all for gas delivered north.
A. Yes, sir.
Q. About how many towns do you supply gas to, all told—your company. From all sources.
A. Do you mean every place?
368 Q. Yes, sir, all told.
A. I think about 70 towns.
Q. Do you know how many different companies you sell gas to by wholesale?
A. No, sir, I don't.
Q. Have you anything to do with that end of the business?
A. No, sir, that is out of my department.
Q. How many wells did your company drill last year?
A. In this particular field, do you mean?
Q. No, sir, all told. The total activity.
A. I think 118.
Q. And the year before how many?
A. I wouldn't be able to tell you that off-hand.
Q. About how many?
A. I think about the same.
Q. That is your average, is it?
A. No, sir, some years we do not drill so many, and other years we drill more. I think last year was perhaps high.
Q. How long have you been drilling wells?
A. In this field, do you mean?
Q. Well, didn't the Logan gas business start about 12 years ago?
A. Yes, sir.
Q. And that is when this field started?
A. Yes, sir.
Q. Isn't this the largest field in the world?
A. No, sir, I think not.
Q. Do you know any fields which are larger than this field was when it was at its best?
A. Yes, sir, the West Virginia field has a great deal more gas than this field has.
Q. This field was the largest field a few years ago, when it was at its best, wasn't it?
369 A. No, sir, I think not. That is, not in the amount of gas that you would get out of the field.
Q. Do you know, from your experience, what the extent of this gas pool is?
A. They have drilled wells in different counties all the way through from Sugar Grove to the Lake, and we have got gas in places and some dry holes.

Q. Where were these wells drilled last year?

A. I think about 12 in the Knox and Licking field, and about 80 in the Ashland and Lorain field, and the others in Pennsylvania.

Q. Have you any leases in West Virginia?

A. I understand that our people have. That is, a part interest with another company.

Q. What is the number of miles of pipe line which the Logan Natural Gas Company has?

A. I wouldn't be able to answer that off-hand; I am acquainted with them all, and know where they are, but I am not able to tell you the mileage.

Q. Can you come within a hundred of it?

A. I would say about 400 miles.

Q. Has it any leased lines?

A. No, sir.

Q. Has it a line of its own to the Ohio River?

A. No, sir, not the Logan Gas Company.

Q. Isn't there one about completed?

A. There are two lines belonging to the Connecting Gas Company, running from the Ohio River to Sugar Grove.

Q. Hasn't the Logan Company a line of its own to the Ohio River?

A. No, sir.

Q. Hasn't it one about completed, that it has constructed?

370 A. No, sir. It belongs to what is called the Connecting Gas Company.

Q. Is that a Logan property?

A. They own half of it I think.

Q. How near do you get to the Ohio River with lines that belong to the Logan Company?

A. Chillicothe.

Q. How far is that from the Ohio River?

A. About 40 or 50 miles.

Q. What amount of gas does Newark consume in a day? Do you know that?

A. That is not in my department; I don't know that.

Q. That is not in your line?

A. No sir.

Q. About twenty million of cubic feet of gas is your estimate of the average daily output of your wells in this field.

A. Yes, sir.

Q. You estimate that you take from that field that much gas?

A. Yes, sir.

Q. What is your estimate of the total capacity of that field? The Licking and Knox field. The total.

A. I am not able to tell that.

Q. You don't know the proportion of the gas that is taken out of there your company takes.

A. No sir.

Q. Can't you get at it that way?

A. No, sir, there are so many different companies taking gas.

Q. Wouldn't it, in your opinion, be over a billion a year?

A. I am not able to answer that.
Q. I mean, a billion a day.
A. I wouldn't expect it to be that much.
371 Q. Doesn't the Ohio Fuel Supply Company take more than you do?
A. I don't know whether they take much more than we do or not. About the same, I think.
Q. There would be no way to find out, from any information that you have, would there?
A. No, sir.
Q. Do you know of any records which are kept of the natural gas operations, which would furnish any clue to the total daily production in that field?
A. No, sir, that would have to be done with a Pitot tube, or with meters. That is the only way that you could find out.

By Edward Kibler: That is all.

HENRY COYLE.

Redirect examination.

Examined by J. R. Fitzgibbon:

Q. You said that in your judgment, there are about 400 miles of pipe owned by the Logan Company.
A. Yes, sir.
Q. Do you mean all told?
A. I mean main lines, It may be a little more than that.
Q. Well, as a matter of fact they have about 2,400, haven't they?
A. He was speaking of the main lines.
Q. The main lines?
A. Yes, sir. Not including the West Virginia lines.
Q. Do you know whether or not the Logan Company has any leases in West Virginia?
A. I simply heard that they had.
Q. Of your own knowledge do you know?
A. I heard it talked about in the office; I didn't see the
372 leases, but I understand that they have a couple of hundred thousand acres or more. That is, they own a half interest in them.

By J. R. Fitzgibbon: That is all.

HENRY COYLE.

Recross-examination.

Examined by Edward Kibler:

Q. Have they any wells in that territory?
A. They own half an interest in a number of wells there.
Q. In West Virginia?
A. Yes, sir.

By Mr. J. R. Fitzgibbon:

Q. How is that?

A. They own half an interest in a number of wells in West Virginia.

By Edward Kibler:

Q. What is the name of the other company? The company that you mentioned?

A. The Connecting Gas Company.

Q. Who is the owner of the other half interest?

A. I don't know, but I think the Standard Oil Company.

Q. How does the Logan Company get to Newark?

A. They take gas from the West Virginia line, to Sugar Grove, and Bangs, and into the 10-inch line coming here.

Q. Is there any connection between Newark and the Homer-Licking field?

A. At Granville.

Q. There is a connection there?

A. Yes, sir.

Q. And the gas that supplies Newark comes in pipe lines from the west and south?

A. And also from the north; from the south end of Burlington Township; we have a station there and feed gas out of that.

373 Q. And there are three pipe lines that lead into Newark, that supply Newark with gas?

A. Yes, sir.

By Edward Kibler: That is all.

R. S. LORD, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Chas. W. Montgomery:

Q. Your name is R. S. Lord?

A. Yes, sir, it is.

Q. Where do you reside, Mr. Lord?

A. I reside at Pittsburgh.

Q. What is your business?

A. I am secretary and treasurer of the Hope Engineering and Supply Company. Do you want to know the business of the company?

Q. Yes, sir. What is the business of the company?

A. We do a general gas engineering and construction work and handle anything in the line of natural gas. We do not do much in artificial gas.

Q. Can you state in a more detailed way, your business in that connection?

A. I had four years' experience with the Philadelphia Company, in piping certain towns—Homestead and Duquesne—and, in 1903, I went into the independent business; and since that time I have been connected with a company that has been furnishing piping material

and constructing lines—city distributing systems, extensively. We make a specialty—and we are about the only ones who make it a specialty, in laying out a piping system, furnishing everything, and building the line, and turning it over to the company, ready to receive the gas, which they must provide.

374 Q. Do you know what the cost of installing such a system as that is?

A. Yes, sir.

By Mr. Jones: What kind of a system is it?

By Mr. Montgomery: Such as he described.

By Mr. Jones:

Q. A pipe line, or a distributing system?

A. Both.

Q. Did you make a valuation of the distributing system of the Newark Natural Gas and Fuel Company in the City of Newark?

A. I did; and one item beyond the city. The line from Thurston to Newark.

Q. When did you make that examination?

A. About the middle of last March.

Q. For whom was that done?

A. I was employed by the President of the Newark Natural Gas and Fuel Company.

Q. When was that?

A. Between the 19th, and some time after the 20th I was in Newark on that work.

Q. What items did you consider in estimating the value?

A. The cost of the material, as near as I could determine the time it was put in, and the labor of installing that material at that time.

Q. Do you know when that was?

A. It was scattered over a number of years. I have in my report items of several years; 1904, and so on. I could not give the exact dates, without looking them up. But it would average about ten years ago.

Q. From your examination and investigation, could you tell how the valuation in March, 1912, would compare with the valuation at the time the plant was installed?

375 A. The material cost, in 1912, was lower than when this plant was put in, slightly; the labor cost was a good deal higher; and, on the basis of doing the work in 1912, it would have cost a little more than it did originally. With a view to the different conditions of the town, in reference to paving, that would have added very materially to the cost; it would run up several thousand dollars, on account of the paving, which was not there when the plant was installed

By Frank A. Bolton: We object. That cannot be taken into consideration.

The Court: The objection is overruled.

By Mr. Bolton: Note an exception.

By Mr. Montgomery: Read the question.

(The Stenographer read the question.)

A. If you are to consider what the plant was worth in 1912—the original material, of course, had depreciated, to some extent, and repairs were made, which added, to some extent, to the original cost. It would depend upon *the* whether it was replaced with other material. It might be anywhere between junk and in first class condition. I don't think I can answer the question definitely.

Q. I will ask you to state how the valuation in March, 1912, of this plant, as a going concern and distributing system, compared with the valuation at the time it was constructed.

By Mr. Bolton: I object.

376 The Court: The objection is sustained.

Q. I will ask you how the physical value of this plant, in actual operation, in March, 1912, compared with the physical value of the plant at the time it was installed.

By Edward Kibler: That is objectionable.

The Court: We think the question is proper.

By Edward Kibler: Note an exception.

By Mr. Montgomery: Read the question.

(The Stenographer read the question.)

By Edward Kibler: We object.

The Court: He may answer.

A. I would suppose that its operating value today——

By Edward Kibler: We do not want anybody's supposition.

The Court: The objection is sustained.

The Witness: I think it is equal to what it was in the beginning. Is capable of doing the same work.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

377 By Edward Kibler: Note an exception.

Q. I will ask you to state what was the physical value of this plant of the Newark Natural Gas and Fuel Company when you made this examination in March, 1912.

A. Three hundred and nine thousand and some odd thousand.

Q. I will ask you whether, in those figures, you included anything except the physical value?

A. Nothing whatever.

Q. I will ask you to state what other items, in addition to the physical value of the plant, should be considered in determining the actual value of the plant.

By Edward Kibler: I object. I do not think that is competent.

The Court: I think that is objectionable. I will sustain the objection.

By Mr. Montgomery: Note an exception.

The Court: We will take a few minutes intermission now.

(Here the court took a recess.)

R. S. LORD.

Direct examination (resumed).

Examined by Chas. W. Montgomery:

Q. I will ask you whether or not there are any items of actual investment other than what is represented by the physical property of a plant.

378 By Edward Kibler: I object.

A. Yes, sir.

The Court: The objection is overruled.
By Edward Kibler: Note an exception.

Q. What are they?

By Edward Kibler: I object.
The Court: The objection is overruled.
By Edward Kibler: Note an exception.

A. Expenses of operation during the time that the plant is being constructed. When I say "operation," I mean such as the salaries and other charges which must pertain to any plant outside of those which are digging ditches and laying pipe; and certain insurance for the protection of the employes and the public, which any business man, or contractor, should carry; and interest on the investment, before it becomes profitable—that is, during the construction; and taxes during the construction.

Q. Anything else?

A. Financing expenses.

Q. Promotion?

By Edward Kibler: I object.
The Court: The objection is overruled.

379 Q. Go ahead.

A. Promotion would be a little different from financing. And working capital, before the plant is producing any earnings.

Q. Anything else?

A. I think those are about all. There are some sub-divisions of those, but those are practically all.

Q. What is meant by organization cost?

A. Outside of the actual labor of the men constructing the system, there must be officers of the company who are to look after the business, and purchasing agents and clerks, and the office force in general.

Q. Can you state what per cent of the total investment would be represented by these items to which you have referred.

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception.

Q. Are you able to state what would be the interest-charge, during the construction of this plant?

By Edward Kibler: I object.
The Court: He may answer, if he knows.
By Edward Kibler: Note an exception.

380 A. The time would naturally be about six months, I would suppose; and on an investment such as is here, I think, as interest, there ought to go in about $4,000, approximately.

By Edward Kibler: I move to rule out the answer.

Q. What do you mean by taxes during the construction?
A. It is taxed whether it is earning anything or not, and the taxes must be paid. It adds to the cost, up to the time that it is ready to do business.
Q. What do you mean by working capital?
A. Expenses will have to be paid while the plant is being constructed, and while it is being operated, before it pays its own way, and you must have something to pay salaries with, and for emergencies. There must be something to meet bills before the people pay for gas.
Q. Can you state how much working capital would be required during the construction of this plant here at Newark?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception.

Q. I will ask you whether or not there is anything else which you have not enumerated, which should be included in the actual investment in this plant.
A. I think I answered that; I have covered everything.
Q. I will ask you, Mr. Lord, what would be the allowance for the promotion cost of this plant?

381 By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception.

Q. Are you able to state what would be the taxes upon this plant during the time it was being constructed?

By Edward Kibler: I object. The books are here in the Court House which will show that.
The Court: He may answer if he knows.

A. I don't know positively.
Q. I will ask you this question, Mr. Lord: What would you say would be the allowance for the cost of the development of this business?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception.

Q. I will ask you what you would say would be a fair allowance for working capital of the business of the Newark Natural Gas and Fuel Company?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Montgomery: Note an exception.

—. That is all.

382 R. S. LORD.

Cross-examination.

Examined by Mr. Roderic Jones:

Q. You have stated a number of elements which you say would be proper to be taken into account as intangible elements of value. Now, I will ask you whether those elements would be taken into account in the construction of a plant built piece-meal—the construction extending over twenty-five or thirty years, or whether you would only consider them as proper elements to be considered in the case of the complete construction of a plant of the size of this at Newark?

A. It would change the value to some extent; there would have to be some consideration given to some portion of it.

Q. It would reduce all, or some, of those elements, considerably, wouldn't it?

A. Not all. Some would be exactly the same. Some would be reduced.

Q. Some would be wiped out, wouldn't they?

A. I don't think of any that would be wiped out; no, sir.

Q. You have placed the value of the actual physical property of this plant at $309,000?

A. Yes, sir.

Q. What basis of computation did you use in arriving at that result?

A. I determined the amount of material in the plant, and, as near as I was able to, the years in which the different portions were put in. And investigated the cost of piping, some of which I had been doing at the same time, and I knew the labor cost, and I learned the material cost, and figured it in that way.

Q. On an investment basis?

A. Yes, sir.

383 Q. That represents $309,000.

A. On the basis of the work done and material furnished in the actual construction.

Q. At the time that the construction was done?

A. Yes, sir; at the time it was performed.

Q Have you made any allowance for depreciation?

A. Not any allowance in those figures for depreciation. The plant naturally depreciates, and, along other lines, it increases in value.

Q. And those figures include no allowance for depreciation at all?

A. They are cost.

By Mr. Jones: I can shorten this proceeding very materially, if counsel shall agree that the witness shall submit to us a statement of the items which go to make up that total. I may not want to cross examine him at all, if I know what they are, and have an opportunity to look at them during the noon hour. I will stop the cross examination now, if that can be done; and I do not know that I will want to cross-examine him at all.

By J. R. Fitzgibbon: I understand that the city has made a valuation, by engineers, and if they will furnish us with the report of their examination——

Q. (Interrupting.) What are the items that you have included in the total?

A. If I was to take all the items, the court would not get done this week.

Q. Well, we will have to stay here until we do get done. I want the items that made up that total?

A. There are a great many items. I have a summary here.

384 Q. Give us that?

A. The line from Thurston to Newark, $48,180.

Q. That line is absolutely obsolescent, isn't it?

A. I supposed it was in use.

Q. Well, suppose it was not in use, would you still include it in this estimate?

A. I was to make an estimate of the value of the Newark Company's property.

Q. Well, if that was not in use, would you still include it in this estimate?

A. Would I include it in this estimate?

Q. Yes, sir.

A. In the estimate of the cost, I would; yes, sir.

Q. Is a line of that kind, that is not in use, a proper item to be put into the estimate of the physical valuation of this plant?

A. As it is today, do you mean?

Q. Yes, sir.

A. If the line is not in use, and there is no prospect of it being used, it would not have, today, the full value that it had in the first place.

Q. What value would it have under those conditions?

A. Second-hand pipe value.

Q. What would that be?

A. Possibly 50% of the original.

Q. And in case that line is not in use, and there is no probability of it being used, would you reduce that $48,000 item to $24,000?

A. Yes, sir.

Q. What other items have you?

A. High and medium pressure systems, $44,093.

Q. What else?

A. Low pressure system, $88,690.

Q. What else?

A. Sixty regulators, with valves and regulator houses,
385 and so forth, $9,630. Service lines, including cost of setting the meters, but not the meters, $6,216.

Q. What else?

A. Meters, $42,060.

Q. Warehouse stock equipment, tools, horses, wagons and so forth, $2,596. Office equipment, $3,236.

Q. What next?

A. Real estate, $1,785. Repairs and replacements, $26,301.

Q What do you mean by that?

I mean lines which have been clamped, largely; cast iron pipe used to be laid entirely with a lead joint, and it, ordinarily, leaked, and it has been found necessary to go over practically all of the city and clamp it, to make such lines effective.

Q. Where did you get your information that it was necessary to go over practically all of the city?

A. I mean, practically all that had cast iron pipe.

Q. Did you assume that that had been done?

A. I know, from experience, that it has to be done.

Q. Did you assume that it had to be done?

A. No, sir; I knew the number of clamps that were put in, taken from records of the company.

Q. Taken from the records of this company?

A. Yes, sir. I sold them some of the clamps. From the number that had been purchased and installed. As to the cost, I took my own knowledge.

Q. What further?

A. That is the larger part of it; there are some other repairs that are necessary, but that is the largest part.

Q. What is the next item of your list?

A. That is the last.

386 Q. And the total is what?

A. $309,015.82.

Q. I want to ask you how thoroughly you have checked your estimate with the books of this company?

A. I have not checked them with their books as to the cost in any way.

Q. And if they have books which show the cost of construction from the inception of the company, you would be unable to know whether your estimates agree with the figures that those books show, or not.

A. I checked with some of their records, in determining the amount of material, but I used my own information as to the cost.

Q. As to what amount of material, did you use their records to determine?

A. Since I could not dig up every line in the city to find out the size, I had to consult someone who did know as to what was in each street; and I took my own measurement as to the length. But when I desired to know just how far a six or seven-inch pipe went, I got it from their map, and their man who is competent, and who knows what is in there.

Q. Did you consult with them as to the cost?
A. I perhaps consulted them to a certain extent, on a few items—certain kinds of meters.
Q. Who did you consult?
A. The officers in Newark, and some who kept the books.
Q. Do you know what books you consulted?
A. I couldn't name them; no, sir.
Q. Are you a civil engineer?
A. No, sir.

By Roderic Jones: That is all.

387 C. L. RILEY, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Montgomery:

Q. You are C. L. Riley?
A. Yes, sir.
Q. You are Auditor of Licking County?
A. Yes, sir.
Q. Have you the tax books of Licking County?
A. I have.
Q. The books showing the estimate for taxation of the property of the Newark Natural Gas and Fuel Company?
A. Yes, sir.
Q. For the year 1912?
A. Yes, sir.
Q. What is that valuation?

By Roderic Jones: I object. The Supreme Court of the United States has expressly decided that it is incompetent. That ought to be a sufficient objection. In the Wilcox case.
The Court: Well, he may answer.
By Roderic Jones: Note an exception.

A. For 1912, $435,670.
By Edward Kibler: How much is that?
A. It is $435,670.

By Edward Kibler: I want to make a motion to rule that out.
388 The Court: It is overruled.
By Edward Kibler: Note an exception.

Q. What was the valuation in 1911?

By Edward Kibler: I object.
The Court: The objection is overruled.
By Edward Kibler: Note an exception.

A. $572,450.
By Judge Douglass: What year is that?
A. That is 1911.

By Edward Kibler: I move to rule out the answer.
The Court: The motion is overruled.
By Edward Kibler: Note an exception.

By Mr. Montgomery: That is all.

C. L. RILEY:

Cross-examination.

Examined by Roderic Jones:

Q. You had nothing to do with arriving at those valuations, did you, Mr. Riley?
A. No, sir; nothing whatever.
389 Q. You received those valuations from the Tax Commission?
A. Yes, sir.
Q. You have no knowledge of how they were arrived at, have you, or on what basis?
A. No, sir; I have no direct knowledge.
Q. You have no personal knowledge?
A. No, sir. Of course, I have some information, but nothing that I can testify to.
Q. Have you the books which show the tax valuation of this property, and the reports filed in your office, according to law, by this company, for the years 1908, 1909 and 1910?
A. Yes, sir; I have them.
Q. Have you the reports made by the company to you, or to the County Auditor, for those years——
A. Yes, sir.
Q. In which they return the value of their property for taxation?
A. Yes, sir.
Q. Will you bring them up?
A. Yes, sir; I can.
Q. I wish you would.
A. Do you want them immediately?
Q. Yes, sir; I want them immediately.
A. It will take me a few minutes to get them.

By J. R. Fitzgibbon: Shall we wait for him?
By Roderic Jones: I think he may bring them in at any time.
By J. R. Fitzgibbon: I will call Roderic Jones.

390 RODERIC JONES, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. Mr. Jones, you are the present City Solicitor of Newark?
A. I am; yes, sir.

Q. Did you have a valuation made of the plant of the Newark Natural Gas and Fuel Company?

By Edward Kibler: I object.
The Court: He may answer that by yes, or no.
By Edward Kibler: Well, how is it material?
A. I suppose it will be conceded that he represents the plaintiff in this case, by virtue of his office?
By Mr. Montgomery: Yes, sir.
By Edward Kibler: I object to the question as put.
The Court: He may answer.

A. I did.

By Edward Kibler: I wish an exception and I move to rule out the answer.

391 The Court: The motion is overruled.
By Edward Kibler: Note an exception.

Q. By whom was that report made?

By Edward Kibler: I object.
The Court: I presume that you are seeking to have the City produce the examination.
By J. R. Fitzgibbon: Yes, sir.
By Edward Kibler: I want an opportunity to get some authorities on that. I cannot do it just this minute. I did not anticipate it coming up. That is, I did not anticipate this question coming up. Counsel cannot look into the private affairs of the opposite party.
The Court: We will give you until one o'clock, to examine into the matter.
By J. R. Fitzgibbon: I suppose this matter will be deferred until that time?
The Court: Yes, sir.

392 JOHN I. HENDERSON, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. Your name is John I. Henderson?
A. Yes, sir; it is.
Q. Where do you live, Mr. Henderson?
A. I live in Newark, Ohio.
Q. What business are you engaged in?
A. I am in the natural gas business.
Q. How long have you been engaged in the natural gas business?
A. For about fifteen years.
Q. With what company are you connected?
A. With the Logan Natural Gas and Fuel Company.
Q. How long have you been connected with that company?
A. About eight years.

Q. What knowledge have you, Mr. Henderson of what is known as the Sugar Grove gas field, and how did you obtain that knowledge?

A. I was in the employment of the Logan Natural Gas and Fuel Company when the Sugar Grove field was being developed.

Q. What position did you occupy with the company at that time?

A. I was in the general office at Lancaster, Ohio.

Q. What knowledge have you, and how did you acquire it, of what is known as the north field, or the Knox-Licking field?

A. I have been in that field for the last four years.

393 Q. Do you know how many wells have been drilled by the Logan Company in the Sugar Grove field?

A. Yes, sir.

Q. How many have been drilled? What is the total number? If you have any data, you may refer to it.

(The witness gets memorandum.)

A. Did you say in the Sugar Grove field?

Q. Yes, sir, in the Sugar Grove field.

A. Two hundred and eighty-three wells have been drilled in that field.

Q How many of those are active at this time?

A. Sixty-five gas wells and nineteen oil wells.

Q. Do the oil wells produce any gas for market purposes?

A. I am not able to say as to that.

Q. How many dry wells were drilled in that territory?

A. Thirty-three.

Q. And how many have been abandoned?

A. One hundred and sixty-three.

Q. Now, in the Homer field, how many have been drilled altogether by the Logan Company?

A. Five hundred and seventy-four.

Q. How many are active at this time?

A. Three hundred and forty-four producing gas wells and five oil wells.

Q. How many wells have been abandoned in the Homer field?

A. One hundred and sixty-two gas wells, and there were sixty wells that were non-productive—dry holes.

By Edward Kibler: How many dry holes?

A. Sixty. And one oil well was abandoned.

Q. Do you know how many wells that Company has drilled in the Ashland field?

A. Yes, sir.

394 Q. How many has it drilled?

A. One hundred and ninety-eight.

Q. How many were dry?

A. Fifty-five. Fifty-five dry holes were drilled; thirty-three have been abandoned, leaving twenty-two which have not yet been plugged.

By Edward Kibler: Dry, fifty-five?

A. Yes, sir.

Q. And how many abandoned?

A. Thirty-three have been abandoned.
Q. How old is the Ashland field?
A. About five years old.
Q. And how old is the Sugar Grove field?
A. The first well in the Sugar Grove field was drilled in in 1894.
Q. When did the development begin in that field?
A. In about 1898.
Q. What companies have been operating in the Sugar Grove field?
A. The Logan Natural Gas Company, the Ohio Fuel Supply Company; what was known originally as the Great Southern Gas Company. Those are the principal companies, I believe, in the Sugar Grove field.
Q. Do you know what the original rock pressure was in the Sugar Grove field?
A. Yes, sir.
Q. What was it?
A. 800 pounds.
Q. Have you any chart showing the depletion of the rock pressure of the wells in that field?
A. Yes, sir.

(Witness gets charts.) (Said charts were hereafter marked by the stenographer G. and H., respectively.)

Q. Is that in the Sugar Grove field?
A. Yes, sir.
395 Q. What townships are there in the Sugar Grove field in which there have been developments?
A. Berne Township *in* the principal one. And Goodhope Township; in Hocking County; Laurel Township in Hocking County; and Walnut Township in Fairfield County; Pleasant Township in Fairfield County.
Q. Have you maps showing the decline in the rock pressure in those different townships, in the wells?
A. I have in Berne Township and Goodhope Township, and Laurel Township. And I have a map showing the decline in the rock pressure in the entire field. It comprises all the townships in which wells were drilled.
By Edward Kibler: Do you mean in the entire Sugar Grove field?
A. Yes, sir. As developed by the Logan Company.

The Court: The witness may step aside now. Mr. Riley is here.

C. L. RILEY (recalled).

Examined by Roderic Jones:

Q. Have you the papers that I asked you to get?
A. Yes, sir.
Q. What have you there?
A. The report for 1908, the report for 1909, and for 1910.
Q. Where did you get those papers?

By Edward Kibler: What reports do you mean?

A. The reports of the Newark Natural Gas and Fuel Company to the County Auditor's office for taxation.

396 Q. Where did you get them?

A. They were on file in our office.

By Mr. Jones: I will introduce these in evidence.

By J. R. Fitzgibbon: We would like to see them.

By Mr. Jones: Certainly.

(Mr. Jones hands papers to counsel for defendant for examination.) (The said papers were here marked, respectively, Nos. 1, 2, and 3.) (True copies of said papers, are hereto attached, made parts hereof.)

By Edward Kibler: Are you going to read them?

By Mr. Jones: I will not read the whole of them, but I am introducing in evidence the tax return now for 1908. I will simply read this part of the return:

*The Newark Natural Gas and Fuel Company Tax Return, Licking County,* 1908.

| | |
|---|---|
| Office furniture and fixtures | $200.00 |
| Gas plant | 41,796.00 |
| | $41,996.00 |

It is sworn to by W. J. Broder, who states that he is the secretary of the company.

Now, the tax return of the Newark Natural Gas and Fuel Company for the year 1909.

It shows the following items:

| | |
|---|---|
| City of Newark, office furniture and fixtures | 200.00 |
| 397 Gas plant | 42,287.00 |
| Newark Township, 3.1 miles of 4-inch pipe at $490 per mile | 1,519.00 |
| Union Township, 6.34 miles of 4-inch pipe at $490 per mile | 3,108.00 |
| | $47,114.00 |

That is also sworn to and subscribed by W. J. Broder who says that he is secretary of the company.

I will introduce in evidence the tax return for 1910, of the same company. It shows as follows:

| | |
|---|---|
| City of Newark, office furniture and fixtures | 200.00 |
| Gas plant | 42,879.00 |
| Newark Township, 3.1 miles of 4-inch pipe at $490 per mile | 1,519.00 |
| Union Township, 6.34 miles of 4-inch pipe at $490 per mile | 3,108.00 |
| | $47,706.00 |

That is sworn to by W. J. Broder, Secretary of the Newark Natural Gas and Fuel Company.

The Court: We will adjourn now until one o'clock.

(Here court adjourned until one o'clock p. m.)

By Judge Douglass: Judge Waight is here, and he wishes to go to Columbus, and if we could examine him now——

398 The Court: Very well.

J. B. WAIGHT, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

Q. You may give your name to the stenographer.
A. J. B. Waight.
Q. Do you reside in Mt. Vernon?
A. Yes, sir.
Q. And you are in the practice of law?
A. Yes, sir.
Q. I will ask you whether or not you were engaged in the natural gas business?
A. Yes, sir, to some considerable extent. I think that is responsible for a good many of my gray hairs.
Q. Beginning when?
A. In 1903.
Q. And are you still in that business?
A. I am not interested in any gas property now.
Q. When did your interests cease? About what time?
A. I think the last property was sold last year.
Q. You may state, generally, to the court, the different enterprises that you were connected with, and in what locality.
A. I was interested in the Knox County Oil and Gas Company; the Homer Natural Gas Company——
By Edward Kibler (interrupting): What was that company?
A. The Homer Natural Gas Company; and the firm of Waight and Levering owned the Butler and Bellville plants.

399 Q. In your experience in any or all of these companies, state whether or not you were a producer and distributor, both.

A. In the Homer Company, we sold the product to the Logan Company. In the other two companies, we were distributors. That is, we sold to the consumers.
Q. You had your own transmission lines, and all that go with the production and distribution of gas?
A. Yes, sir.
Q. Are you acquainted with the territory generally known as the Knox-Licking field?

A. I was, up until the time I ceased to have any interest in the properties. I don't know anything about the present conditions.

Q. You may state, if you know, about what was the initial rock pressure in that field?

A. Do you mean in the Knox-Licking field?

Q. Yes, sir, in the Knox-Licking field.

A. About 800 pounds.

Q. At the time that your knowledge covers, what was the situation then as to the rock pressure?

A. I think at the time we sold our wells in the Knox-Licking field, the pressure was under 150. If I remember correctly. I have not tried to carry the figures in my mind.

Q. As it affects the yield and cost, or the worth of gas, explain to the court what that great decrease, or depreciation, in the rock pressure means?

A. It means a failure to deliver the quantity of gas. The amount of gas delivered from a well depends very largely upon the rock pressure and the line pressure against which it is delivered.

Q. With a well having eight hundred pounds rock pressure, and one having 150 or 200 pounds, as to the amount of gas which
400 would be delivered from those two wells—state, if you know, about what the real disparagement is between two such wells.

A. I probably knew at one time, but the figures have passed out of my mind, not being actively connected with it, but I know that the depreciation is very great.

Q. As affecting the cost of production, what will necessarily follow a well reduced to 160 or 200 pounds—as to the cost of keeping it up and in order?

A. There is a great deal of increased cost in the maintenance of a well. As the rock pressure goes down, the salt water comes in and it has to be kept out, of course.

Q. As to the added cost, then, of keeping up these depleted wells—taking all the factors that enter into the cost, with the rock pressure between the ranges of 800 and down to 160—can you put in per cent what the cost would be, more than at the initial pressure?

A. I don't believe I could answer a question upon a percentage basis, but there is a very large increase in the cost of producing gas occasioned by the decrease in your rock pressure, and the increased attention required of your wells. Without thinking about the matter more than I have had time to do now—I wouldn't want to express it in the form of a per cent.

Q. Have you any knowledge of the Sugar Grove field?

A. No, sir.

Q. Can you name the large companies operating in the Knox-Licking field at the time you were acting?

A. The Ohio Fuel and Logan.

Q. Well, the minor companies?

A. I think the company having the next larger number of wells, was the Homer Company, probably; and the Knox County
401 Oil and Gas Company; the Upham Gas Company. I do not know of any others except the companies which would develop one farm, or such a matter as that.

Q. Can you state what per cent of your wells are abandoned?
A. Do you mean now?
Q. Yes, sir.
A. I think at the time we sold the property to the Logan Company—I think they pulled over half of them; they were sold upon the basis of the value of the junk.
Q. Have you any recollection of the per cent of dry holes by the different companies in the Knox-Licking field?
A. Well, the per cent of dry holes was not large in the Knox-Licking field.
Q. What was the per cent north of Mt. Vernon?
A. The per cent of dry holes was very much larger in what we called the Butler field.
Q. State to the court some of the greater elements of risk in the natural gas business. Some of the elements that attend the business, as distinguished from other businesses.
A. I wouldn't know how to state them unless it would be the danger of getting dry holes and the very heavy cost of producing gas. That is, drilling wells and caring for them and laying the pipe line to market the product.
Q. Is the acreage that you carry an element that figures in that?
A. If you have a market that you are required to supply, you have to carry an acreage in advance to make provision for your supply. So far as the Homer Company was concerned, we simply sold the product from the leases that we had, and we didn't have to keep up any acreage, because there was no specified amount
402 that we were to supply. We were to drill so many wells a year on the acreage which we had.
Q. Well, that policy would not do for a company that produces and distributes, would it?
A. A company that has a market to supply must keep territory, in advance of the development, under lease.
Q. What about the territory that is carried and has been carried as acreage by the large companies, including your company as well? What per cent of that, if you have any notion of it, turns out to be worthless?
A. There is a considerable portion of the territory in advance of the development which you have under lease, and when the development comes, there isn't any gas in it. If I would put the Butler property in a per cent, I would think that ninety per cent of the leases which we carried for years turned out to be dry holes, and the leases were surrendered.
Q. From your experience and knowledge of the Knox-Licking field, and the City of Newark, what would you say would be a fair and reasonable price, or rate, to be charged to the City of Newark, Ohio?

By Edward Kibler: I object. I object on the ground that it is incompetent, and lack of qualification.
The Court: He may answer.
By Edward Kibler: Note an exception.

A. I wouldn't think it ought to be under twenty-five cents, net.

By Judge Douglass: You may cross examine.

403 J. B. WAIGHT.

Cross-examination.

Examined by Edward Kibler:

Q. What did the Homer Company get for gas under the contract that you had with the Logan Company?
A. We started with 3 and ¼ cents and finally advanced to 8.
Q. Per thousand?
A. Yes, sir.
Q. How long did you deliver gas to them?
A. I would say from recollection as long as five years.
Q. When did you sell out the Homer Company?
A. I think two years ago they bought.
Q. You sold to the Logan Company?
A. Yes, sir.
Q. Did you sell your other properties to the same company?
A. No, sir. The Butler and Bellville property was sold at receiver's sale. They were bidders, I think.
Q. Is that all the property that you had?
A. Yes, sir.
Q. Was that the Waight and Levering concern?
A. Yes, sir.
Q. What became of the Knox County Oil and Gas Company?
A. That was sold to Upham, and is still being used, except as abandoned, by the Upham Gas Company.
Q. And two years ago, when you sold out to the Logan Company, they were getting the Homer Company's gas at eight cents?
A. Yes, sir.
Q. Do you know what the rock pressure was at that time?
A. My recollection is that it was under 150 pounds, and yet that is a subject I haven't thought of from the time I parted with my interest in the property. I knew at that time, and that is my best recollection.

By Edward Kibler: That is all.

404 J. B. WAIGHT.

Redirect examination.

Examined by Judge S. M. Douglass:

Q. What was the price paid at Butler and Bellville?
A. Eighteen cents, net.
Q. And the company went bankrupt?
A. No, sir. Fortunately, we escaped bankruptcy, but we notified Bellville and Butler that if they would not advance that rate, we

would not drill any more wells, in an effort to supply them with natural gas.

By Edward Kibler: I do not think that is competent.
The Court: That latter part may go out.

Q. The gas that you sold to the Logan Company from the Homer Company—was that sold right in the field, at the wells?
A. Yes, sir, at two central points in the field.

JOHN I. HENDERSON.

Direct examination (resumed).

Examined by J. R. Fitzgibbon:

Q. These are the charts that you referred to in your examination before lunch? (Indicating charts.)
A. Yes, sir.

By J. R. Fitzgibbon: I wish the stenographer would mark them. (The stenographer marked the charts, as requested, G, H, I, J, and K, respectively.)

405 Q. What does chart G. refer to?
A. That refers to the Sugar Grove field.
Q. What are these notations up here? (Indicating.)
A. Those are the years.
Q. What are these notations along the side?
A. The scale of the pressure.
Q. What are these notations along the bottom of the chart?
A. The number of wells employed in arriving at the pressure.
Q. What does that chart indicate in reference to the rock pressure?
A. The decline in the rock pressure from the original pressure to June, 1911.
Q. What was it in June, 1911?
A. 113 pounds.
Q. What is chart H?
A. That is a composite chart, also of the Sugar Grove field.
Q. What does that chart indicate?
A. A record, based upon 77 wells. The rock pressure at the end of December 31, 1911, was 75 pounds.
Q. What period does that cover?
A. One year.
Q. And what was the initial pressure at the beginning of that year?
A. 125 pounds.
Q. What does chart I represent?
A. That represents Berne Township. It is a chart showing the depletion, in the Sugar Grove field.
Q. And the notations on the border of the chart have reference to the same matter as in chart G?
A. Yes, sir.

Q. What does the chart show as to the depletion of the wells in Berne Township?

A. It shows that on June 1, 1911, twenty-two wells gave 64 pounds rock pressure, average.

406 Q. What was the original rock pressure?

A. 800 pounds.

Q. When?

A. In 1894.

Q. What does chart J represent?

A. The depletion of the rock pressure in Laurel Township, Hocking County, in the Sugar Grove field.

Q. What does it show?

A. That on June 1, 1911, the average rock pressure, based on sixteen wells, was 106 pounds.

Q. What does it show that the initial rock pressure was?

A. 750 pounds.

By Edward Kibler: What do you mean?

A. In 1901.

By J. R. Fitzgibbon: In 1901?

A. Yes, sir.

Q. Chart K represents what?

A. The depletion of the rock pressure in Goodhope Township, Hocking County, in the Sugar Grove field.

Q. What does it show?

A. That on June 1st observations based on seven wells, gave a rock pressure, average, of sixty-one pounds.

Q. What was the initial rock pressure?

A. In 1899 it was 760 pounds.

By J. R. Fitzgibbon: We offer those charts in evidence.

(The charts offered in evidence, as aforesaid, were heretofore marked by the stenographer Exhibits G, H, I, J, K.) (True copies of said charts, above referred to, are hereto attached, made parts hereof.)

407 Q. Now, have you charts showing the depletion of the wells in the Knox-Licking field, by townships?

A. Yes, sir.

Q. Will you present those?

A. Yes, sir.

(The witness gets charts.)

(The said charts were here marked by the stenographer L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-9, L-10, L-11, L-12, L-13, L-14, L-15, L-16, L-17.) (True copies of said charts, so marked, are hereto attached, made parts hereof.)

Q. What do these charts from L-1 to L-17 inclusive, represent?

A. They represent the decline in the rock pressure in the different townships in the Licking-Knox field.

Q. What are these notations, or figures, at the top of the charts?

A. The years.

Q. And what are the notations on the side?

A. The scale of pressure, in towns.

Q. And the notations at the bottom represent what?

A. The number of wells used in arriving at the result.

Q. And those notations are true in reference to the other charts—from L-1 to L-17, inclusive?

A. Yes, sir.

Q. What township does L-1 represent, and what does it show?

A. Burlington Township, Licking County, and it shows the depletion of the rock pressure in that territory to January 1, 1913.

Q. What does it show in reference to the depletion?

A. That the original rock pressure was 608 pounds.

Q. In what year?

A. In the year, 1903. There has been a depletion of 467 pounds, or 77% leaving the rock pressure, January 1, 1913, 141 pounds.

408 Q. What does chart L-2 represent?

A. It refers to Bennington Township in the Knox-Licking field.

Q. What does it indicate?

A. The initial rock pressure in 1903 was 702 pounds, and it shows that there has been a decline, amounting to 621 pounds, or 88%, leaving the average rock pressure, January 1, 1913, 81 pounds.

By Edward Kibler: You don't say how many wells.

A. The number of wells in Burlington Township, in arriving at the result—the number taken was 31. And Bennington Township—20.

Q. All of these are wells of the Logan Company?

A. Yes, sir, they are.

Q. Now, what does chart L-3 represent?

A. That shows the decline in the rock pressure of all the wells owned by the Logan Company in Homer field. It indicates that the initial rock pressure in 1902 was 760 pounds. And there was a decline to January 1, 1913—the difference being between 760 and 156.

By Edward Kibler: What is the present rock pressure?

A. 156 pounds, based on 317 wells.

Q. What does chart L-4 represent?

A. It represents the decline in the rock pressure in Licking Township, in Licking County. It indicates that in 1909 the rock pressure was 591 pounds, and that there has been a depletion of 400 pounds, or 68%, leaving it at the present time—an average rock pressure of 191 pounds.

Q. January 1, 1913?

A. Yes, sir. That is based on 18 wells.

409 Q. What does chart L-5 represent?

A. Chart L-5 represents the rock pressure in Granville Township, Licking County. It shows that in 1907, the rock pressure was 625 pounds; a depletion of 408, or 65% of a decline; leaving, at the present time, an average rock pressure of 217 pounds, based on eight wells.

Q. What does chart L-6 represent?

A. Chart L-66 represents a decline in the rock pressure in Eden

Township, Licking County. It indicates that in 1909, the average rock pressure was 671 pounds, with a decline of 434 pounds, or 65%, leaving, at the present time an average rock pressure of 237 pounds, based on 33 wells.

Q. What does chart L-7 represent?

A. The decline in the rock pressure in Washington Township, Licking County. It indicates that in 1907, the average rock pressure was 735 pounds, with a depletion of 454 pounds, or 62% of a decline; leaving, at the present time, an average rock pressure of 281 pounds, based on 17 wells.

Q. What does chart L-8 represent?

A. It represents the decline, or depletion, of the rock pressure in St. Albans Township, and indicates that in 1907, the average rock pressure was 360 pounds, with a depletion of 288 pounds, or 80%, leaving, at the present time, an average rock pressure of 72 pounds. That is based simply on one well.

Q. Have you any other wells in St. Albans Township?

A. I believe not.

Q. What does chart L-9 represent?

A. It represents the decline of rock pressure in McKean Township, Licking County, and indicates that in 1907, the average rock pressure was 684 pounds, with a decline of 527 pounds, or
410 77%, leaving 157 pounds as the average rock pressure at the present time, based on 16 wells.

Q. What does chart L-10 represent?

A. It represents the decline in the rock pressure in Clinton Township, Knox County. It indicates that in 1904, the average rock pressure was 700 pounds, with the decline of 627 pounds, or 90%, leaving, at the present time, an average rock pressure of 73 pounds, based on 19 wells.

Q. What does chart L-11 represent?

A. Chart L-11 represents the decline in the rock pressure in Clay Township, Knox County, Ohio; it indicates that in 1909, the maximum rock pressure was 560 pounds, with a decline of 310 pounds, or 55%. Leaving, at the present time, an average rock pressure of 250 pounds, based on ten wells.

Q. What does chart L-12 represent?

A. It represents the decline in the rock pressure in Union Township, Licking County, Ohio, and indicates that in 1907 the average rock pressure was 560 pounds, with a decline of 430, or 77%, leaving 130 pounds, as the average rock pressure, based on 13 wells.

Q. What does chart L-13 represent?

A. Chart L-13 represents the decline in the rock pressure in Millford Township, Knox County, and indicates that in 1903 the average rock pressure was 580 pounds, with a decline of 515 pounds, or 90%, leaving at the present time an average rock pressure of 65 pounds, based on 21 wells.

Q. What does chart L-14 represent?

A. Chart L-14 represents the decline in rock pressure in Pleasant Township, Knox County, and indicates that in 1904 the average

rock pressure was 725 pounds, with a decline of 580 pounds,
411 or 80%, leaving, at the present time, an average rock pressure of 145 pounds, based on—well, I have omitted to mark the number of wells. I think 19 wells.

Q. What does chart L-15 represent?

A. Chart L-15 represents the decline in the rock pressure in Harrison Township, Knox County. In 1905, the average rock pressure was 549 pounds. Decline 423, or 77%. Leaving at the present time, an average rock pressure of 126 pounds, based on five wells.

Q. What does chart L-16 represent?

A. Chart L-16 represents the decline in the rock pressure in Morgan Township, Knox County; in 1902, the average rock pressure was 760 pounds, with a decline of 616 pounds, or 81%, leaving, at the present time, an average rock pressure of 144 pounds, based on 44 wells.

Q. What does chart L-17 represent?

A. Chart L-17 represents the decline in the rock pressure in Miller Township, Knox County. It indicates that in 1903, the average rock pressure was 564 pounds. With a decline of 459 pounds, or 81%, leaving at the present time, an average rock pressure of 105 pounds, based on 44 wells.

Q. What is this other map? (Indicating map.)

A. That is a township map.

By J. R. Fitzgibbon: I offer those charts in evidence—seventeen of them. (True copies of said charts are hereto attached, made parts hereof, marked L-1 to L-17, respectively.)

Q. Upon what are those charts based?

A. On the individual records of each well.

412 Q. I will ask you whether these documents represent that data? (Indicating papers.)

A. These two do.

(The said papers were marked by the stenographer M and N.)

Q. What are these documents marked M and N?

A. They are records of the rock pressure of the individual wells from year to year, from which the data for the charts was taken.

By J. R. Fitzgibbon: I offer them in evidence.

(The said documents were, as aforesaid, marked by the stenographer M and N, respectively.) (True copies of said documents, marked M and N, respectively, are hereto attached, made parts hereof.)

Q. Have you data showing the total number of wells drilled and abandoned and dry holes drilled by the Logan Company in the Knox-Licking field and the Sugar Grove field, and in the Ashland field?

A. Yes, sir.

Q. And showing the per cent of each?

A. Yes, sir.

Q. I wish you would give us that data.

By Mr. Roderic Jones: Didn't we have that this morning?
The Court: You are asking for the total?
By J. R. Fitzgibbon: Yes, sir.

A. A few of the wells that appear in the total, were purchased. About 50 of them were purchased. The others were drilled. They drilled and purchased 1055 wells.
Q. That is, in the three fields?
A. Yes, sir.
413 Q. Of that total number, how many have been abandoned? What per cent.
A. I can give the number. I have not figured the per cent. There have been abandoned 326 gas wells, and two oil wells.

By Roderic Jones: We move to rule that out.
By J. R. Fitzgibbon: We do not care about the oil wells.

A. And 126 wells came in dry; making a total of 451 wells.
Q. Have you any wells which are dry, but which are not abandoned?
A. Yes, sir.
Q. How many of that kind has the Logan Company?
A. Twenty-three.
Q. Have you the per cent of the wells which have been abandoned, or which are unproductive?
A. Yes, sir. Of the wells drilled in the three fields, 43% have been abandoned.
Q. What per cent have been abandoned, or unproductive at this time?
A. 45%.
Q. In the Sugar Grove field?
A. 70%.
Q. And in the Homer field?
A. 48%—well, the total wells which have been abandoned in the Homer field is 38%. The 48% applies to both the Sugar Grove and Homer fields.
Q. And 70% in the Sugar Grove field exclusively?
A. Yes, sir.
Q. Do you know where the gas which is used by the City of Newark comes from?
A. Yes, sir.
Q. Where does it come from?
A. Part of it from the local field, and part of it comes from West Virginia.
414 Q. What per cent of it comes from West Virginia? And what per cent from the Licking-Knox field?
A. About forty per cent comes from West Virginia leaving fifty or sixty per cent from the local field.
Q. Is that the average for the entire year?
A. Yes, sir.
Q. At any certain period of the year, do these percentages increase?

A. Yes, sir.

Q. And, if so, when? That is, in the use of the West Virginia gas?

A. In January and December—in the winter months—the colder months—we are obliged to take more gas from West Virginia.

Q. About what per cent in those cold months is taken from the West Virginia line?

A. Fifty-five or sixty per cent.

By Judge Douglass: That is all.

JOHN I. HENDERSON.

Cross-examination.

Examined by Edward Kibler:

Q. What office do you hold in the Logan Company?

A. I haven't any title.

Q. It is all in salary and no title?

A. Well, I do a little work.

Q. Do you devote all your time to the interests of the Logan Company?

A. Yes, sir.

Q. And you have for eight years?

A. Yes, sir.

Q. Are you in the field or in the office?

A. Part of the time I have been in the office. For the last four years I have been in the field part of the time. A part of my time is in office work.

415

Q. Where do you have your headquarters? In Lancaster?

A. No, sir, in Newark.

Q. In Newark?

A. Yes, sir.

Q. Where are the general offices of the Logan Company?

A. In Columbus, Ohio.

Q. What have been your duties in the field?

A. The inspection and testing of meters and gauging wells, and miscellaneous duties in connection with laying pipe lines.

Q. Have you taken any of these tests yourself that are represented on these charts?

A. Yes, sir.

Q. What amount?

A. I have gauged about three or four hundred wells in the Homer field from time to time.

Q. How did you get these reports from the different wells, that you put into the charts?

A. The wells are gauged every month by men who have charge of the wells, and the reports are sent in to the Utica field office.

Q. Where are the original reports?

A. Mr. Emsweiler has them in a suit case.

Q. The reports from which Exhibits M and N are made?

A. Yes, sir.
Q. Did you make these up yourself?
A. Yes, sir.
Q. Or, were they made under your direction?
A. The chart that you have in your hand, I made up myself. The other chart was made up in the Columbus office, and was verified by me from an examination of the records there.
Q. Does it cover all the reports that have been made?
A. Yes, sir. So far as they appear upon the records in the Columbus office.
416 Q. Then, it is a complete test of all the wells so far as the reports are in the Columbus office?
A. Yes, sir. I might be able to make it clearer——
Q. (Interrupting.) Well, you only compiled such reports as are in the Columbus office. All you did was to compile reports that were in the Columbus office?
A. Yes, sir.
Q. You didn't have anything to do with making those reports yourself, did you?
A. Only the 400 wells that I gauged myself.
Q. When was that?
A. In 1909, 1910, and 1912.
Q. You gauged 400 wells?
A. Yes, sir.
Q. What sort of a test did you make?
A. A gauge was attached, and the pressure on the line was observed, and the line gate was closed, and the pressure, as it ran up, was recorded, as it ran up from minute to minute and, in a great many instances, the well was shut in over night, and the next day the rock pressure was taken.
Q. What was the average daily output of all the wells of the Logan Company in the Licking territory? In 1912?
A. I haven't any records to show that.
Q. You didn't take that?
A. No, sir.
Q. You simply tested the rock pressure?
A. Yes, sir.
Q. You didn't take the open flow?
A. Very seldom, except in special instances.
Q. As to the amount of gas that the company disposed of out of that territory—have you any fiures as to the total output?
A. No, sir.
417 Q. Have you any idea as to that?
A. No, sir.
Q. Can you come within a million feet a day of it?
A. No, sir.
Q. In the Sugar Grove chart—did you have anything to do with making any test there?
A. No, sir.
Q. Do you know whether it represents all the wells that the Logan Company has in that territory?

A. Yes, sir, it does.

Q. How do you know?

A. Because the wells that appear on the chart represent almost identically the number that they have.

Q. Why don't you know something about the gas output?

A. We haven't any record of that. We don't make any open flow tests.

Q. Why can't you tell that?

A. I am more familiar with the well records than with the accounting feature.

Q. How much gas is delivered to Newark a year from the Homer field by your company?

A. I think about sixty per cent.

Q. How much gas? What is the volume, I mean?

A. That would be about nine hundred million feet.

Q. In how long a time?

A. In a year.

Q. Nine hundred million feet a year was delivered from the Homer field by your company to the City of Newark?

A. Yes, sir.

Q. Where do you get that information?

A. In the Columbus office.

Q. Of that nine hundred million feet a year, with the exception of the winter months, what per cent is that of the whole amount consumed?

A. In the summer, do you mean?

418 Q. Yes, sir, outside of the cold months.

A. I haven't any figures on that. The average for the year is fifty or sixty per cent.

Q. Well, sixty per cent is the average that comes from the Homer field during the whole year?

A. Yes, sir.

Q. You don't know what per cent comes from the Homer field during the months of the year other than the cold months, do you?

A. Not exactly. We would not require as much gas from the West Virginia line in the summer months as in the winter.

Q. Your line is not benefited by the compressor system in Knox County, is it?

A. I am not able to state that.

Q. That station does not operate on the Newark pipe line at all, does it?

A. I am not able to say that.

Q. The flow that Newark gets is the natural pressure of the gas, without any artificial assistance, isn't it?

A. Not from the Homer field, no, sir.

Q. The pressure that Newark gets is the natural pressure in the line, without any assistance from the pumps, isn't it?

A. No, sir, it is compressed.

Q. Well, don't you know that it is not?

A. I believe it is compressed, to the best of my information.

Q. But you are not testifying from your actual knowledge of the facts?

A. No, sir, I am not.

Q. Don't you know that it is only the gas that is delivered north of the compressor station that goes through the compressor?

A. Yes, sir.

Q. And none that is delivered south?

A. I believe not.

Q. Then you are wrong about that, are you not?

A. I said that, to my own personal knowledge, I don't
419 know whether it is compressed or not. I know that the gas that comes from the Sugar Grove end is compressed.

Q. How is that?

A. I know that the gas that comes from the Sugar Grove end is compressed.

Q. Newark is not getting any Sugar Grove gas, is it?

A. I mean, from the West Virginia line, coming into Sugar Grove.

Q. The West Virginia gas goes through the Sugar Grove compressor?

A. Yes, sir.

Q. The chart that you have exhibited here as to the Sugar Grove district, covers the entire number of wells owned by your company?

A. Yes, sir.

Q. Have you any separate chart as to the Licking County field, showing what the rock pressure is in that field? You haven't anything as to the entire field, have you?

A. Yes, sir, in the right hand corner.

Q. Is that L-3?

A. Yes, sir.

Q. In that, you gave the rock pressure in 1902 as 760 pounds?

A. Yes, sir.

Q. And in 1913, 156 pounds?

A. Yes, sir.

Q. And that was taken from 317 wells?

A. Yes, sir.

Q. 317 is the number of wells that you have?

A. No, sir; the number of wells are as I gave them. 317 wells is the number that were used in arriving at the average rock pressure. We only have 344 producing wells in the Homer field, and we used 317 in arriving at this result. That leaves 27 which we were not able to use because they were not, at the time, productive.

Q. This record cove-s the best wells, does it?

A. The best and poorest. 317 wells. 27 were not productive.

420 Q. Are they wells that have been not used, or wells that have been exhausted? Plugged wells?

A. We wouldn't call them producing wells.

Q. You were not taking any gas from them when you were making the test?

A. 27 wells were not in use. They may have been dead.

Q. Well, they may not have been dead?

A. Some of them were probably dead.

Q. Do you know when they were drilled—those which you do not include in this report?

A. No, sir.

Q. How do you know whether the Newark gas comes from? When I asked you those questions, you didn't know that the Newark gas did not come from the compressor station, did you? You thought it did?

A. I wasn't sure about it.

Q. What enables you to tell what per cent of gas that Newark uses comes from that source, or from some other source? Did somebody tell you that?

A. I understood that.

By Edward Kibler: I move to rule that out, then.

Q. How much else that you have testified to is information that you got from someone else?

A. Nothing else.

Q. Nothing else?

A. No sir.

Q. What is the highest rock pressure that you got in the Licking field on the 1st of January, 1913?

(Witness gets paper.)

Q. That report that you have there, covers the last test of your wells, does it, that was made?

By J. R. Fitzgibbon: Well, let him answer the other question.

421 The Court: Give him time to answer the question.

A. Yes, sir; this report shows the last test.

Q. Now, take the townships in Licking County, and the four south townships of Knox County, and let me know the highest rock pressure that appears on that record.

A. From this record, I cannot give that information. I can give the highest rock pressure, as it appears on this record, but I cannot separate the townships.

Q. Can't you tell what township the well is in?

A. The highest rock pressure that I find on this report is 620 pounds.

Q. What was the output of that well?

A. I don't know; I have not the record of it here.

Q. Where is that well located?

A. It is a new well. It is serial number 1089.

Q. You have them numbered serially, have you?

A. Yes, sir.

Q. You gave the number of wells as 1,055?

A. Yes, sir. But we have a number of locations which we have not drilled in yet. The minute the location is made, we give it a serial number.

Q. When was that well drilled?

A. I don't know.

Q. What is the next well, in maximum pressure, in the Licking-Knox field, that you have on your record?

A. 325.

Q. Is that the next one?

A. Yes, sir.

Q. What is the number of that well?

A. 1010.

Q. You don't know where it is located, do you?

A. No, sir; I don't.

422 Q. Or what its gas output is?

A. No, sir.

Q. You don't know what township it is in?

A. No, sir.

Q. And you don't know when it was drilled, do you?

A. No, sir; I don't.

Q. What is the next one, as to the maximum pressure?

A. 305 pounds.

Q. How many wells did you have in this territory, as shown in those records, in 1913, which showed a rock pressure of over 200, in 1913—the first of this year?

A. I can give the number that have a rock pressure in excess of 200 pounds, but the rock pressure does not appear for all the wells.

Q. How could you make up the record. then?

A. We used 317 wells, representing the rock pressure for the year.

Q. I want you to tell me how many wells, on the 1st of January, the Logan Company had in this Licking-Knox territory, which showed a rock pressure of over 200 pounds.

A. I cannot tell you from the data that I have here.

Q. How could you give the other data then?

A. The memorandum, or data, from which I made that—I haven't it with me. This is a record of the wells to June 1, 1911.

Q. When is your next record?

A. I computed the rock pressure for the intermediate period, but I have not the memorandum, or data, with me, and consequently I cannot refer to the wells between June 1, 1911, and June 31, 1912.

Q. Have you any record that will show the rock pressure

423 of the field?

A. Yes, sir. I have a record, taken in January, 1913.

Q. But it is not complete, is it?

A. The rock pressure of every well does not appear; no, sir.

Q. Have you the rock pressure of an earlier date?

A. I have a complete record in July and August, 1912.

Q. Taking the record in July and August, 1912, how many wells does that show which are active?

A. I would have to count them before I can tell you.

Q. Well, I wish you would. I am referring to the Knox-Licking field?

A. Yes, sir.

(The witness figures.)

A. I have a record here of the rock pressure of 236 wells.

Q. But that is not complete, is it?

A. It is evidently not; no, sir.

Q. Did you select the reports, or did you bring the whole bulk of the reports on file?

A. They were taken from the Columbus office. There were five volumes, I believe.

Q. You have not the sources of the information that enabled you to prepare these charts, have you?

A. I have given the figures to June 1, 1911.

Q. How many wells did you have on June 1, 1911—of 150 pounds rock pressure?

A. That is another matter of counting. I will have to go through these.

Q. Well, I want to know that. You can do it some other time?

A. Yes, I can give them to you later on.

Q. I want to know the number of wells that you had in this field of over 150 pounds rock pressure, on June 1, 1911, or any
424 other date that you have a complete record of, and the latest date that you have, which is a complete record?

A. Yes, sir.

Q. Of the 1,089 wells, which your company has drilled, all told, how many have been in the Ashland field?

A. 198.

Q. Subtract that from the total number of wells; subtract the Sugar Grove and Ashland field wells from the general total, and tell me how many wells your company has drilled in the Licking-Knox field?

A. 574, if my figures are correct.

Q. How many of those were dry holes?

A. Sixty.

Q. You claim to have 317 active wells now in the field?

A. I will have to discriminate between what you consider an active well; we may be able to revive some which we have.

Q. Well, you are only counting the wells that are in use, in the 317?

A. Yes, sir. We have 344 wells which have not been abandoned.

Q. Do you know what the total consumption of gas is in Newark a year?

A. No, sir.

Q. The average?

A. No, sir. I know what it was in 1912.

Q. What was it?

A. Approximately, a billion and a half feet.

Q. For the whole year?

A. Yes, sir.

Q. Did you get that from the records of the company?

A. Yes, sir.

Q. How does that compare with the total amount of gas that you take from that field out of your wells?

A. Fifty or sixty per cent of that comes from the Licking County field.

425 Q. Well, that is not what I asked you. How many times more than a billion and a half a year do you take out for all consumers, from that same field?

A. I am not able to state.

Q. How many times more than a billion and a half a year do you take out of this field?

A. I don't know.

Q. Can you give any idea?

A. No, sir.

Q. Isn't it more than seven billion a year that you take out of this field?

A. I am not able to say as to that. I don't know what the output is of the Homer field.

By Edward Kibler: That is all.

JOHN I. HENDERSON.

Redirect examination.

Examined by J. R. Fitzgibbon:

Q. While you are getting the information requested by counsel on the other side, I wish you would ascertain for us the number of wells in this field having a rock pressure of seventy-five and under that?

A. Yes, sir.

The Court: We will have a few minutes intermission now.

(Here the court took a recess.)

By Edward Kibler: I will call Mr. Henderson.

The Bailiff: Mr. Henderson is not ready yet.

By Mr. Fitzgibbon: Mr. Stoughton is here now. You said you wanted the figures verifying the annual depreciation.

426 By Mr. Kibler: I think I asked him to bring in the figures.

Mr. STOUGHTON (recalled).

Examined by Edward Kibler:

Q. Mr. Stoughton, will you repeat the statement that you made the other day as to the annual depreciation of the wells?

A. I said that it was my opinion that it is about 31% annually; but I find that I was in error.

Q. You want to make it larger, do you?

A. I find that the average annual per cent decrease for the four years has been 49.52%.

Q. Did you have any assistance in doing that?
A. No, sir.
Q. Where did you have the material?
A. I had it at home.
Q. Will you make a statement of the items that make that up?
A. Yes, sir.
Q. What are they?
A. I have invoiced those by townships. That is the way that I took the depletion.
Q. Where did you get the figures, 31%, that you gave us the other day?
A. It was a question in my mind *or* what it was, and I took one year—from the September to the April invoice; and after I took it, we drilled so many wells; and I found out that from September to April, the depreciation was about 31%; and I thought that that would probably be a conservative estimate.
Q. That estimate was not made in reference to your testi-
427 fying in this case, or in any other case, was it?
A. No, sir.
Q. You have made this up since you went home?
A. Yes, sir.
Q. What are your figures?
A. The annual average depreciation in the open flow is 49.52%.
Q. You are trying to express the decrease in the flow?
A. Yes, sir.
Q. Each year?
A. Yes, sir.
Q. What wells did you examine?
A. I took each well.
Q. What did you have to go on—any reports?
A. Yes, sir; the reports that are made out each year.
Q. Where did you get those reports?
A. They are from the annual invoice, and they were taken under my supervision. This last year, I took them all myself.
Q. Did you have these reports at home?
A. Yes, sir.
Q. What figures did you make to change the result from 31 to 49%?
A. When I got the 31%, I took just one year.
Q. What figures have you now as to the per cent of depreciation being 49?
A. I can give it by townships.
Q. What time does it cover?
A. The four years that I have had charge.
Q. The last four years?
A. Yes, sir.
Q. What part of the territory have you charge of?
A. The north field. It comprising Licking County, and a little bit in Knox County.
Q. Four townships in Knox?

A. No, sir; only one township. Clay.

428 Q. And how many wells have you taken into consideration?

A. All the wells.

Q. How many?

A. They vary from year to year. I said yesterday that we had 133, but we have 138.

Q. Where are they located?

A. They are all in Licking County with the exception of one well which is in Clay Township, Knox County.

Q. That is just what are within your jurisdiction?

A. Yes, sir.

Q. And your testimony only applies to the 138 wells?

A. Yes, sir.

Q. Give your statement as you have it?

A. The average annual depreciation for Bennington Township is 51%.

Q. How do you make that out? I want to see the figures by which you reach that result?

A. All right. I have them all here. (Witness gets papers.) In 17 wells—the open flow in Bennington Township—4,566,667*8* cubic feet of gas.

Q. What was the rock pressure at that time?

A. The rock pressure at that time ranged from 115 to 400 pounds.

Q. Do you know what the average rock pressure was of those 17 wells in April, 1909?

A. I can tell by adding them up and dividing by the number of wells. That will give the average per well.

Q. What does "L" stand for here?

A. That is line.

Q. That is the line pressure?

A. Yes, sir.

Q. These are the 17 wells in Bennington Township?

A. Yes, sir. At that time.

429 Q. And the open flow you have here was, in 1909, in April, 4,566,677 cubic feet?

A. Yes, sir.

Q. What date did you compare that with?

A. A year from that—in 1910.

Q. Those same wells were all in operation, were they?

A. Yes, sir; those same wells.

Q. Did you make these tests yourself?

A. Part of them I did. They were all done under my supervision. Of course I didn't have time to do it all. I showed a man how, and I was with him whenever I could go, but the last year I took them all myself.

Q. In 1910, you made the open flow 1,808,117 cubic feet?

A. Yes, sir. The same wells.

Q. Now, take some other township.

A. Here is Burlington.

Q. All right. 29 wells in Burlington Township. Open flow, April, 1909, 8,283,437 cubic feet?
A. Yes, sir.
Q. That is right, is it?
A. Yes, sir.
Q. And you compared that with April, 1910?
A. Yes, sir. In April, 1910, there are some new wells.
Q. You have the *the* tests in September, 1909?
A. Yes, sir. But it is not quite the same.
Q. Well, it is the same as the next April?
A. Yes, sir.
Q. You have excluded the new wells from April, 1910?
A. Yes, sir. To get the per cent.
Q. What are your figures?
A. The average depletion is 38.6.
Q. Twenty-nine wells?
A. Yes, sir.
430 Q. Did you find what the depreciation was between September, 1909, and April, 1910?
A. No, sir.
Q. In September, 1909, the open flow was 9,651,356.
A. Yes, sir.
Q. That is right?
A. Yes, sir.
Q. In April, 1910, the open flow was 7,004,221?
A. Yes, sir.
Q. The same wells?
A. Yes, sir.
Q. Now, as between September and April, you haven't figured that?
A. No, sir. I just figured it from year to year. The average is 25.6%.
Q. In Burlington Township, you give figures for April, 1909, and 1910. Some of these wells were plugged in McKean Township, and you take from April, 1909, to April, 1910?
A. Yes, sir. 24 wells.
Q. The open flow for these 24 wells for April, 1909, was 11,953,888.
Q. What are your figures for McKean Township?
A. 24 wells in 1909, open flow, 9,420,013.
Q. That is in September?
A. Yes, sir. And the same 24 wells, the open flow in 1910, was six million——
Q. (Interrupting.) It is eight million, isn't it——
A. No, sir; six million.
By J. R. Fitzgibbon: What was the open flow in September of those 24 wells?
A. 6,998,824.
Q. Are you willing to put in evidence these reports, providing you get them back, in the sweet by and by?

A. They are company property, Mr. Kibler.

431 Q. Well, I would like to have them in evidence.

The Court: Do you offer them in evidence?

By Edward Kibler: Yes, sir; it will save the examination, and we can make our calculation.

The Court: Let the reports be marked.

By Edward Kibler: The court orders the reports filed, and that will be your justification for leaving the reports with us. There are some others here. I would like to have you leave these, too.

A. I will leave all of them.

(The papers were marked by the stenographer 0-1, 0-2, 0-3 and 0-4, and 0-5.) (True copies of said papers are hereto attached, made parts hereof.)

By Edward Kibler: That is all.

The Court: I will hear from you now as to the objection raised in Mr. Jones' Examination.

By Edward Kibler: I think the right of the defendant to obtain this evidence is clearly denied by the Supreme Court.

(Counsel here argued the objection to the court.)

The Court: I will sustain the objection. The answer may be stricken out—the answer of the witness. I am not holding that the evidence of any examination as to the valuation made for the City is not competent, but the court holds that you cannot secure it in this manner.

432 By Edward Kibler: You cannot pluck it from the other side.

By Mr. Fitzgibbon: Will your Honor indicate how we can get it?

By Edward Kibler: Will your Honor indicate how they will try their case?

The Court: Place the man who made it on the witness stand.

By Mr. Fitzgibbon: I wish to ask Mr. Jones some questions.

RODERIC JONES:

Examined by J. R. Fitzgibbon:

Q. By whom was that examination made?

By Edward Kibler: I object.

The Court: The objection is sustained.

By J. R. Fitzgibbon: Note an exception.

The Court: The record should show who Mr. Jones is.

By J. R. Fitzgibbon: It does. It showed that when he was placed on the witness stand before.

By Edward Kibler: I should show that he is the City Solicitor.

433 By J. R. Fitzgibbon: Yes, sir that is correct. We expect to show that the appraisement was made by an engineer by the name of Riggs of Detroit Michigan, and we wish an exception to the ruling of the court.

Q. When was this examination made?

By Edward Kibler: I object.
The Court: The objection is sustained.
By Mr. Fitzgibbon: Note an exception and I expect the evidence to show that the examination was made sometime after this suit was filed and I wish an exception.

Q. I will ask you to state whether or not any report was made to you of the result of that examination and investigation.

By Edward Kibler: I object.
The Court: The objection is sustained.
By J. R. Fitzgibbon: Note an exception. And we except the evidence to show that there was such a report, and we wish an exception.

Q. Have you that report with you?

By Edward Kibler: I object.
The Court: The objection is sustained.
434 By J. R. Fitzgibbon: Note an exception. And we offer to show that the witness has the examination and report and we wish an exception.

Q. Will you present it?

By Edward Kibler: I object.
The Court: The objection is sustained.
By J. R. Fitzgibbon: Note an exception.

Q. What does the report show?

By Edward Kibler: I object.
The Court: The objection is sustained.
By J. R. Fitzgibbon: Note an exception. And we expect the evidence to show that this report shows a valuation of about $350,000.

W. V. WONDERLEY, being first duly sworn, as provided by law, testified as follows

Direct examination:

Examined by Judge S. M. Douglass:

Q. What is your name?
A. My name is W. V. Wonderley.
Q. Mr. Wonderley, where do you reside?
A. I reside at Lancaster, Ohio.
435 Q. You are employed by what company?
A. By the Logan Natural Gas and Fuel Company.
Q. At what business are you employed?
A. Superintendent of compressor stations.
Q. How many compressor stations has the Logan Natural Gas and Fuel Company in Ohio?
A. They have two.
Q. Where are they located?
A. One is located at Sugar Grove Ohio and one at Bangs.
Q. In Knox County?
A. Yes, sir.

Q. What is the horse power capacity of the Sugar Grove Station?
A. Five thousand six hundred horse power.
Q. And what is the capacity of the Bangs compressor station?
A. Six thousand two hundred horse power.
Q. Are you in charge of both of those stations?
A. I am yes, sir.
Q. Are you the superintendent?
A. I am.
Q. Have you charge of all the men employed and everything?
A. I have.
Q. State to the court how West Virginia gas is delivered through the State of Ohio?
A. We received the West Virginia gas through a Pitot tube measuring station, at Sugar Grove, where it is handled to us from the West Virginia line, and passes through the Sugar Grove compressor. After passing through the compressor, it passes through the cooling ponds, and on to its destination.
Q. In what direction?
A. North and west.
Q. Does it go to the towns at the lakes?
A. It intermingles with Ashland gas.
Q. Does the Bangs station receive the West Virginia gas?
A. Yes, sir.
436 Q. And that is from Sugar Grove?
A. From Sugar Grove, yes, sir.
Q. And when delivered to that station, where does it go?
A. After passing through the compressor at Bangs—Bangs acts as a relay station, and delivers the gas through the northern and western systems.
Q. Do you know the extent of the northern and western systems—as to the number of towns and cities?
A. Only in a general way.
Q. Well, that is all that I care for.
A. Do you want me to name them?
Q. No. About how many towns?
A. Approximately sixty towns? There may be more than that.
Q. North?
A. Yes, sir, north from Bangs.
Q. How is the gas delivered to the City of Newark?
A. We have a sixteen inch trunk line running from the Sugar Grove compressor station to Bangs; and a six inch line comes off, west of Newark, through which the gas is transmitted to the City.
Q. What is the size of the line running from the six inch line over to Newark?
A. I have heard that it is a six inch line. I have not seen it, though.
Q. Could the gas produced in the Ashland field be brought back to Newark according to the system?
A. It could not. It would be impossible.
Q. Why would it be impossible?

A. With the present equipment. It would be necessary to make complete changes of the Bangs compressor station.

Q. And would that change be expensive?

A. It would be necessary to lay a suction line——

437 Q. Would it be expensive?

A. It would be expensive, yes, sir.

By Judge Douglass: That is all.

W. V. WONDERLEY.

Cross-examination.

Examined by Edward Kibler:

Q. Is the Ashland field connected with the Bangs station now?

A. No, sir.

Q. The only gas that comes to Newark under pressure is what comes from the Sugar Grove district.

A. How is that?

Q. The only gas that comes into Newark now is the *the* gas that comes in that six inch line?

A. I am not familiar with the field. I know the gas that we handle from the compressor station. I am not familiar with the field. I am a compressor station man.

Q. Well, that is the only gas that comes under pressure—a six inch line off of the sixteen inch line, which extends from Sugar Grove to Bangs?

A. Yes, sir.

Q. Do you know whether the gas is metered to Newark or not?

A. I don't.

Q. That gas comes through your station at Sugar Grove?

—. Yes, sir.

Q. Is the gas metered off of the sixteen inch line to Newark, as far as you know?

A. Not that I know of, after it passes through the compressor station.

Q. You get the gas that you send to Bangs through that compressor station at Sugar Grove from West Virginia, and

438 Sugar Grove and from some other sources, don't you?

A. From West Virginia, and a small quantity from Sugar Grove.

Q. From any other sources than those two?

A. Not that passes through the compressor station.

Q. Are there any wells connected with that pipe line between the Sugar Grove compressor station and the Bangs compressor?

A. No, sir. There is a connection that runs to Lancaster for the purpose of supplying Lancaster. We supply some to Lancaster, but if anything should happen, there is a connection at the Children's Home by which we can by-pass the gas to Lancaster.

Q. You have a line to Lancaster?

A. Yes, sir.

Q. And one to Newark?
A. Yes, sir.
Q. What is the size of the Lancaster line?
A. Six inches. The line to Lancaster is simply used in emergency cases.
Q. That is a six inch line?
A. Yes, sir.
Q. Is there any meter there where it goes off to Lancaster?
A. I couldn't say positively.
Q. You said something about a cooling pond. What do you mean by a cooling pond?
A. The gas heats in compression. There is a series of pipes passing through water.
Q. Are they at the compressing station?
A. They are ahead of the compressors at the compressor station.
Q. The gas is heated by the compression?
A. Yes, sir.
Q. And it passes where?
A. Through the cooling pond.
439 Q. And after it is compressed that it passes through the cooling ponds?
A. Yes, sir.
Q. And into the line?
A. Yes, sir.
Q. What is the process?
A. They have a series of small pipes passing through the pond and the cold water is admitted at one end and as it takes the heat from the gas it overflows at the other end.
Q. Well, it is a radiator?
A. You may term it a radiator. It is simply to get the heat out of the gas but not for the purpose of radiating the heat.
Q. You don't have these cooling arrangements except as a part of the compressor stations?
A. No, sir. That is a part of the equipment at the station.
Q. It is not necessary to cool it in transit, is it?
A. No, sir. It is necessary to cool it before it passes into the main line.
Q. How much does that increase the pressure in the line?
A. It depends entirely upon the conditions. The lower your intake on the low side of the compressor, the greater would have to be the capacity of your compressor station in order to get the amount of compression that you would desire.
Q. What pressure do you ordinarily carry between the two stations?
A. From Sugar Grove to Bangs?
Q. Yes, sir.
A. It depends entirely upon the weather. During cold weather we make an effort to carry two hundred pounds in the morning. But during the day on a hard draw, it will run down to sixty or seventy-five pounds.
440 Q. How is it in the summer time?
A. In the summer time there is no trouble at all.

Q. What pressure do you carry in the summer time?
A. From one hundred to one hundred and twenty-five pounds.
Q. That is adequate in the summer time?
A. Yes, sir.
Q. What is the object of passing the compressor at Bangs?
A. To increase the velocity of the gas.
Q. To increase the velocity of the gas?
A. Yes, sir.
Q. Have you any other compressor stations before you get to the lakes?
A. No, sir.
Q. The Bangs compressor carries the gas to Toledo, does it?
A. We do not send any to Toledo.
Q. Do you send any to Sandusky?
A. Yes, sir.
Q. Where is this connection between the six inch pipe line to Newark and your sixteen inch trunk line?
A. At a place called Riley's corners.
Q. What county is that in?
A. It must be in Licking County.
Q. Well, we haven't any Riley's corners in Licking County unless it was located lately. Do you—what township it is in?
A. No, sir, I don't know that.
By Mr. Krick: I know that there is a little place called Riley's Corners.
The Witness: It must be in Licking County.

By Judge Douglass:

Q. How far is it from some other point?
A. I believe it is about six miles from Newark.
441 Q. Where does it pass through Licking County—the sixteen inch line?
A. One of the points is near Granville and on a straight line from that to Bangs. Bangs is five miles from Mt. Vernon in Knox County.
Q. Then the gas that comes to Newark through that six inch line does not get any impetus from the Bangs compressor?
A. No, sir.
Q. None whatever?
A. No, sir.
Q. You don't know what proportion of the gas that Newark uses comes through that six inch line, do you?
A. No, sir, not in the volume.

By Mr. Krick: Riley's Corners are in Burlington Township.
By Edward Kibler: That is all.

A. J. DROLET, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by J. R. Fitzgibbon:

Q. What is your name?
A. My name is A. J. Drolet.
Q. Where do you live, Mr. Drolet?
A. I live in Pittsburgh, Pa.
Q. What business are you engaged in?
A. I am engaged in the natural gas business.
Q. In what company are you in the employ of at this time?
A. The Union Natural Gas Corporation of Pittsburgh.
442 Q. What position do you hold in the Union Natural Gas Corporation?
A. General Auditor.
Q. What relation has the Union Natural Gas Company to the Logan Natural Gas and Fuel Company?
A. It is one of the largest stockholders of the Logan Company.
Q. What relation has the Union Natural Gas Corporation to The Newark Natural Gas and Fuel Company?
A. It is one of the largest stockholders in the Newark Natural Gas and Fuel Company.
Q. How long have you been the auditor of the Union Natural Gas Corporation?
A. For four years of the Union.
Q. How long?
A. Four years ago last January the 1st.
Q. As auditor of the Union Natural Gas Corporation, what duties have you in reference to the Logan Natural Gas Company?
A. The Union Natural Gas Corporation handles all the general accounting work of the Logan Natural Gas Company.
Q. Has the Logan Natural Gas Corporation any gas leases in West Virginia?
A. No, sir.

By Edward Kibler: We do not claim that the Logan has any.

Q. Well, does the Logan Company own any interests in any companies in West Virginia?
A. No, sir. The Logan Company has no interest in any stock or leases in West Virginia.
Q. Has it any interest or holdings in the Connecting Gas Company?
A. No, sir.
443 Q. What is that company?
A. The Connecting Gas Company is merely a transportation company. It takes the gas from the Ohio River line—twelve inch—and transports it to the Sugar Grove station for distribution to Ohio companies.
Q. Where is the gas of the Connecting Gas Company sold to the Ohio companies?

A. At Sugar Grove, Ohio.

Q. Do you know how many acres are under lease in Ohio by the Logan Natural Gas Company?

A. I could tell you approximately. I have not the records right with me. I believe in December, 1911, they had under lease approximately 466,000 acres in Ohio; covering the Sugar Grove, Homer, Ashland, and Lorain field.

Q. That was in December, 1911?

A. Yes, sir. The figures for 1912 have not been completely compiled yet.

Q. Do you know whether that number has been increased yet?

A. I couldn't tell you. I am in touch with the lease department. I know merely the records in the past.

Q. In how many acres has there been development by the Logan Company and how much at this time?

A. I couldn't tell you. The lease department merely turns in the total; but from coming in contact with that work, I believe it is about seventy-five thousand acres which are operated. I remember that I have come in contact with the lease department and went after that special data. We do not carry any division between the operative department and that which is not in our accounting work. It is all handled in a separate lease department.

444 Q. Do you know how many acres in the Knox-Licking field you have under lease?

A. I may have the figures here. (Witness examines memorandum.) In the Homer field, on December 31, 1911, we had a total acreage of 43,000 acres.

Q. And how much in the Sugar Grove and Ashland fields?

A. In the Sugar Grove field 24,000 acres. In the Ashland and Lorain field, 399,000.

By Mr. Bolton: How many in the Sugar Grove field?

A. 24,000 acres I am giving the even numbers. I have the odd numbers if you wish them.

Q. Do you know what the average rental per acre those leases carry?

A. No, sir. That would be impossible for me to give the average rental. When we figure the rental that we carry in Ohio, we estimate it, for our own satisfaction, or place it at about a dollar an acre.

Q. What is the average royalty paid for producing wells by the Logan Company?

A. That is a little out of my department. In the lease department they turn over a voucher showing the rentals on so many acres and the royalties on so many wells. It is carried as a rental expense and a royalty expense. And as to the division of that, I wouldn't be able to tell you, but it ranges from——

By Edward Kibler: Well, I object to his guessing.

A. Well, I don't know.

Q. Have you any data showing the cost of production of gas by the Logan Natural Gas Company in Ohio?

A. Yes, sir.

445 Q. I wish you would refer to that, please. I will ask you from what source that data was prepared.

A. From the distribution of expense account. Representing the actual expenditures that were made in the field during the different periods in which I show the costs; against the amount of gas that the expenditure actually produced in the State of Ohio.

Q. What years are covered by your data?

A. From 1903 to 1911, inclusive.

Q. Under the head of "field cost" what items have you?

A. Repair of lines, repair of wells, changing construction, drilling of new wells—just the labor itself—no physical feature included in that—repair of meters and miscellaneous maintenance expense. That covers the maintenance.

Q. I will ask you what in 1903, it cost the Logan Company by way of field cost to produce a thousand cubic feet of gas?

A. 3 57/100 cents a thousand.

Q. What was it in 1904?

A. 4 and 2/100 of a cent a thousand.

Q. What was it in 1904?

A. 4 and 2/100 of a cent a thousand.

Q. And what was it in 1905?

A. 6 and 5/100 of a cent a thousand.

Q. And what was it in 1906?

A. It was 6 and 36/100 of a cent a thousand.

Q. What was it in 1907?

A. It was 6 67/100 of a cent.

Q. What was it 1908?

A. It was 6 and 24/100 of a cent in 1908.

446 Q. What was it in 1909?

A. It was 7 and 58/100 of a cent.

Q. And what was it in 1910?

A. It was 9 and 46/100 of a cent.

Q. 1911 what was it?

A. 10 and 61/100 of a cent.

Q. Have you any data for the year 1912?

A. No, sir, I have not compiled any data for 1912.

Q. What other charges have you made in estimating the total cost of production for the Logan Company in producing a thousand cubic feet of gas?

A. The fixed charges.

Q. What do you mean by that?

A. The depreciation, and a proper profit on the investment, that is represented in that field in order to produce that gas. The amount that I have included in there is an arbitrary amount. That is a question that can be left open. I have added six per cent upon the field investment as a depreciation; on the investment, I have added a profit of eight per cent upon the field investment alone; showing what it cost for the actual production of that gas, with all fixed charges added to it; what it cost us, net.

Q. As a basis of fixed charges on depreciation alone, what per

cent should be added in 1903, to the figures you have already given in reference to the field cost?

By Edward Kibler: I object.

Q. How much per one thousand cubic feet; of depreciation? In 1903?

A. 2 and 11/100 of a cent.

Q. Just go on with the different years.

A. In 1904, 2 and 9/100 of a cent. In 1905, 2 and
447 72/100. In 1906, 3 and 7/100 of a cent. In 1907, 2 and 67/100 of a cent. In 1908, 3 and 9/100 of a cent. In 1909, 3 and 38/100 of a cent. In 1910, 3 and 87/100 of a cent. In 1911, 4 and 3/100 of a cent.

Q. At eight per cent upon the field investment, what do you figure additional a thousand cubic feet of gas cost for those years?

A. In 1903, 2 and 81/100 of a cent. In 1904, 2 and 79/100 of a cent. In 1905, 3 and 63/100 of a cent. In 1906, 4 and 9/100 of cent. In 1907, 3 and 56/100 of a cent. In 1908, 4 and 12/100 of a cent. In 1909, 4 and 51/100 of a cent. In 1910, 5 and 16/100 of a cent. In 1911, 5 and 37/100 of a cent.

Q. I will ask you what it cost the Logan Natural Gas Company to produce a thousand cubic feet of gas with the eight per cent profit and the depreciation charge which you have given.

A. This figures the cost in the main line, and without any transportation charges.

Q. What does that show in the various years?

A. In 1903 it shows 8 and 49/100. In 1904——

By Mr. Bolton: What is this?

A. The total cost of gas in the field, without any transportation cost; including an eight per cent profit on the field investment.

Q. Is that profit or interest on the investment?

A. In computing the scale of six per cent depreciation—I have just given that as an arbitrary amount; it is a fair return on the investment. I have added six per cent as a conservative amount. What it has done in our own field—the results.

448 Q. Well, go on.

A. In 1904, 8 and 91/100 of a cent. In 1905, 12 and 4/100 of a cent. In 1906, 13 and 52/100. In 1907, 12 and 90/100. In 1908, 13 and 45/100. In 1909, 15 and 47/100. In 1910, 18 and 49/100. In 1911, 20 and 1/100.

Q. You said that that included the compression charges.

A. Yes, sir. And the gas in the main line without transportation charges. The compression charges are recognized as a field expense, and I have not taken that out in order to determine any of the figures in which I made these computations.

Q. Do you know what it cost the Logan Company to construct the two compressor stations at Bangs and at Sugar Grove?

A. The one in the Homer field cost us to date $323,371.42. That is the actual cost. The bills for which we can produce for every item.

Q. And what did the one in the Sugar Grove field cost?

A. $275,800.58.

Q. These costs do not include transportation charges?

A. No, sir, they do not include transportation charges, but they include six per cent depreciation upon the compressor investment and also eight per cent profit, and the expenses of operating the compressing stations; in other words, it means the gas at the head of the compressing station.

Q. What do you figure that it costs to transport gas in the State of Ohio?

A. Do you mean without any fixed charges, or do you mean to include the proper charges for depreciation and profit?

449 Q. I mean, with the proper charges on investment and so forth.

A. I have not the figures with me, but I think, for 1911, that it cost us 3 and 36/100 of a cent.

Q. Is that included in any of these charges that you have made?

A. No, sir.

Q. Have you compiled a statement showing the prices received by the Logan Natural Gas and Fuel Company from various cities and towns supplied by it in this State from 1903, to 1911, at wholesale?

A. Yes, sir, I have.

Q. Will you read those, please?

By J. R. Fitzgibbon: I wish the stenographer would mark this paper for identification.

(The paper indicated was marked by the Stenographer Exhibit P for identification.)

By Mr. Fitzgibbon: That is a paper that the witness used in his testimony.

Q. Now, I want to know the price received by the Logan Natural Gas Company at wholesale to the various cities in the State of Ohio from 1903 to 1911.

A. From the Bellview Gas Company—in 1903—the Logan Company received 16 and 52/100 of a cent for all the gas. In 1904, 16 and 77/100 of a cent. In 1905, 16 and 17/100 of a cent. In 1906, 16 22/100 of a cent. In 1907, 17 and 25/100 of a cent; in 1908, 18 and 45/100 of a cent. In 1909, 19 and 14/100 of a cent. In 1910, 19 and 84/100 of a cent. In 1911, 19 and 32/100 of a cent. That covers the gas sold to the City of Bellview on a per cent basis. The Dayton Gas Company in 1906, 17 and 56/100 of a cent. In 1907, 18 and 85/100 of a cent. In 1908, 18 and

450 92/100 of a cent. In 1909, 19 and 15/100 of a cent. In 1910, 19 and 7/100 of a cent; in 1911, 18 and 73/100 of a cent.

Q. Where does the Dayton Gas Company operate?

A. It operates in the City of Dayton.

Q. Do you know whether it has competition there, or whether is is the only gas company?

A. I couldn't tell you anything about their local conditions. It is delivered to them at the Sugar Grove station, and they own their

own lines to Dayton. That is the amount that we received for gas at Sugar Grove.

Q. Do you know how long that line is from Sugar Grove to Dayton which they have constructed?

A. Well, I have not the figures, but in figuring that line on the maps, I think it runs about eighty-five miles. It is twelve inch part of the way and ten inch. That is merely a recollection with me, that that is the size and the length.

Q. Well, take up the next.

A. The Delaware Gas Company, at Delaware, Ohio, in 1903, 15 and 77/100 of a cent. In 1904, 15 and 61/100 of a cent. In 1905, 15 and 85/100 of a cent. In 1906, 15 and 80/100 of a cent. In 1907, 16 and 67/100 of a cent. In 1908, 18 and 8/100 of a cent. In 1909, 18 and 16/100 of a cent. In 1910, 18 and 24/100 of a cent. In 1911, 17 and 82/100 of a cent. That is sold on a per-cent basis. This is the proportion that the Logan Company received for all the gas sold to the Delaware Company for those years.

Q. Well, take up the next one.

A. The Marion Gas Company. In 1903, 13 and 51/100 of a cent. In 1904, 13 and 75/100 of a cent. In 1905, 13
451 and 31/100 of a cent. In 1906, 13 and 20/100 of a cent. In 1907, 15 and 14/100 of a cent. In 1908, 16 and 51/100 of a cent. In 1909, 18 and 39/100 of a cent. In 1910, 18 and 5/100 of a cent. In 1911, 17 and 41/100 of a cent.

Q. Take up the next.

A. The Citizens Gas and Electric Company. In Lorain and Elyria. In 1904, 12 and 54/100 of a cent. In 1905, 13 and 9/100 of a cent. In 1906, 13 and 28/100 of a cent. In 1907, 14 and 35/100 of a cent. In 1908, 15 and 64/100 of a cent. In 1909, 18 and 11/100 of a cent. In 1910, 19 and 25/100 of a cent. In 1911, 16 and 73/100 of a cent.

Q. Take of the next.

A. The Sandusky Gas and Electric Company, Sandusky, Ohio. In 1904, 14 and 71/100 of a cent. In 1905, 14 and 35/100 of a cent. In 1906, 13 and 83/100 of a cent. In 1907, 15 and 6/100 of a cent. 1908, 16 and 51/100 of a cent. In 1909, 16 and 63/100 of a cent. In 1910, 17 and 28/100 of a cent. In 1911, 16 and 46/100 of a cent.

Q. Take up the next.

A. The Fremont Gas, Electric Light and Power Company, at Fremont, Ohio: In 1904, 11 and 91/100 of a cent. In 1905, 11 and 73/100 of a cent. In 1906, 11 and 83/100 of a cent. In 1907, 12 and 79/100 of a cent. In 1908, 13 and 70/100 of a cent. In 1909, 16 and 70/100 of a cent. In 1910, 16 and 67/100 of a cent. In 1911, 16 and 3/100 of a cent.

Q. Take up the next.

A. The Buckeye Gas Company, Circleville, Ohio: In 1904, 12 and 16/100 of a cent. In 1905, 12 and 96/100 of a cent. In 1906, 13 and 74/100 of a cent. In 1907, 14 and 75/100 of a cent. In 1908, 14 and 44/100 of a cent. In 1909, 14 and 68/100 of
452 a cent. In 1910, 15 and 8/100 of a cent. In 1911, 15 and 48/100 of a cent.

Q. Take up the next.

The Newark Natural Gas and Fuel Company, in Newark City: In 1903, 6 and 32/100 of a cent. In 1904, 9 and 62/100 of a cent. In 1905, 9 and 68/100 of a cent. In 1906, 9 and 67/100 of a cent. In 1907, 10 and 5/100 of a cent. In 1908, 10 and 40/100 of a cent. In 1909, 10 and 50/100 of a cent. In 1910, 11 and 16/100 of a cent. In 1911, 11 and 76/100 of a cent. This average varies a great deal on account of the different—in some towns they sell special gas in which they share, and as that varies, the rate of return to us varies accordingly. The average received from all gas sold by the Logan Natural Gas and Fuel Company in 1903, was 12 and 8/100 of a cent. In 1904, 12 and 84/100 of a cent. In 1905, 13 and 26/100 of a cent. In 1906, 14 and 38/100 of a cent. In 1907, 15 and 54/100 of a cent. In 1908, 16 and 61/100 of a cent. In 1909, 17 and 53/100 of a cent. In 1910, 18 and 21/100 of a cent. In 1911, 17 and 49/100 of a cent.

By Mr. Fitzgibbon: I wish the stenographer would mark that paper now Exhibit Q.

(Said paper was here marked by the stenographer Exhibit Q.)

Q. Have you a chart or any data as to the total amount of gas produced by the Logan Company from 1903 to 1911, as well as the total amount of gas consumed here in the City of Newark in those years?

A. Yes, sir. I have a table showing the total amount in feet produced in Ohio by the Logan Natural Gas and Fuel Company,
453 and also the total gas sold to all domestic and special consumption in the City of Newark, and the per cent of the gas produced that went to Newark, showing the amount of consumption as compared with the total production.

Q. I wish you would give that.

A. In 1903, our production was 9,016,000,000. In 1904, 8,662,000,000. In 1905, 7,359,000,000. In 1906, 7,690,000,000. In 1907, 9,846,000,000. In 1908, 9,336,000,000. In 1909, 8,933,000,000. In 1910, it was 8,202,000,000. In 1911, 8,259,000,000.

The total amount of gas sold in the City of Newark in 1903 by the Newark Natural Gas and Fuel Company was 1,886,000,000. In 1904, 1,479,000,000. In 1905, 1,477,000,000. In 1906, 1,591,000,000. In 1907, 1,640,000,000. In 1908, 1,434,000,000. In 1909, 1,546,000,000. In 1910, 1,477,000,000. In 1911, 1,505,000,000.

Q. What per cent does that bear to the total amount?

A. The total amount of gas sold by the Newark Natural Gas and Fuel Company in City of Newark, as compared to the total amount of gas produced in the State of Ohio by the Logan Natural Gas and Fuel Company for 1903 is 21%; in 1904, 17%; in 1905, 20%; in 1906, 20.7%; in 1907, 16.7%; in 1908, 15.4%; in 1909, 16.3%; in 1910, 18%; in 1911, 18.2%.

Q. You have the average consumed, daily.

A. Yes, sir. That (indicating paper) shows the largest month in the different years—the average. There are some days in the

month on which they will use more gas than others. But it means the average.

454 Q. Well, state that.

A. In 1903, the daily average was 8,323,000 feet. In 1904, 6,466,000 feet. This is the largest month in the year. In 1905, 6,966,000 feet. In 1906, 6,790,000. In 1907, 7,433,000 feet. In 1908, 7,133,000 feet. In 1909, 6,700,000 feet. In 1910, 7,600,000. In 1911, 7,133,000 feet.

Q. How many towns and cities in the State of Ohio are furnished gas by the Logan Natural Gas and Fuel Company?

A. It is about seventy-two towns, I think.

Q. About seventy-two?

A. Yes, sir.

Q. Have you data showing a comparison of yearly consumption for domestic use for the years 1909 to 1911, inclusive of various cities in this State giving the rate and the amount of yearly average consumption?

A. I have comparisons of Lorain in 1909——

Q. (Interrupting.) In preparing that chart, what was your aim?

A. To show that the cheaper the gas is the more they will use. That is, if gas was ten cents people would not be so economical. If it was thirty cents, they would be more careful and economical. When they burned gas here in the open fires, at so much a fire they used about four times as much gas as they do now. They opened the windows and let the fires go. It was to show, by comparison, of the towns with which we were in close touch—it was in those towns that we made the comparison.

Q. Give us that average.

A. The comparison of average yearly consumption, domestic consumers, for years 1909 to 1911, inclusive: In Lorain, the average rate, thirty and four-tenths of a cent a thousand. They used an average of 89,000 cubic feet a year. In 1910, the rate was thirty-one

455 and four-tenths. They consumed 86,000 cubic feet. In 1911, the rate was thirty and five-tenths and they consumed 83,000 cubic feet. In Fremont the rate in 1909 was thirty and one-tenth of a cent. They consumed 86,000 cubic feet. In 1910, thirty and seven-tenths of a cent. They consumed 89,000 feet. In 1911, the rate was thirty cents and they consumed 87,000 cubic feet. In Elyria in 1909 the rate was thirty and two-tenths of a cent. They consumed 114,000 cubic feet. In 1910, the rate was thirty and two-tenths of a cent. They consumed 118,000 cubic feet. In 1911, the rate was thirty cents, and they consumed 106,000 cubic feet. In Marion, the rate was thirty cents and they consumed 110,000 cubic feet in 1909. In 1910, the rate was thirty and two-tenths of a cent and they consumed 118,000 cubic feet. In 1911, the rate was thirty and two-tenths of a cent and they consumed 112,000 cubic feet. In Chillicothe, the rate was twenty-five and two-tenths of a cent and they consumed 119,000 cubic feet. In 1910, the rate was twenty-five and two-tenths of a cent and they consumed 126,000 cubic feet. In 1911, the rate was twenty-five and eight-tenths of a cent and they consumed 116,000 cubic feet. At Circleville at a rate of twenty-four

and two-tentus of a cent they consumed 129,000 cubic feet. At a rate of twenty-four and eight-tenths of a cent per thousand they consumed 133,000 feet. At twenty-six cents they consumed 121,000 cubic feet. Mansfield Rate twenty-five cents and they consumed 128,000 feet in 1909. In 1910, twenty-five cents and they consumed 137,000 cubic feet. In 1911, twenty-five cents and they consumed
127,000 cubic feet. In Newark, in 1909, at eighteen cents,
456 they used 143,000 cubic feet. At eighteen and one-tenth of a cent, they consumed 154,000 cubic feet in 1910. In 1911, average twenty-two cents—I have not the figures complete in 1911, in Newark.

Q. What is the number of thousand feet?

A. 140,000 cubic feet. That is, figuring it at twenty-two cents.

Q. At twenty-two cents a thousand?

A. Yes, sir, at twenty-two cents a thousand.

By J. R. Fitzgibbon: I will ask that this paper be marked for identification.

(The stenographer marked the paper, as requested, for identification, R.)

By Judge Douglass: We are about to go into another subject, which involves an analysis of the cost.

The Court: Well, we will adjourn now.

Here court adjourned until 9 o'clock a. m.

9 o'clock a. m.

By Judge Douglass: We have a witness of whom we would like to ask a few questions.

The Court: Very well. Call the witness.

J. A. SNOKE, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Judge S. M. Douglass:

457 Q. Mr. Snoke, where do you live?

A. I live at Utica, Ohio.

Q. What is your business, or how are you employed?

A. I am looking after wells for the Logan Company.

Q. Are you a division superintendent?

A. Yes, sir.

Q. Over what territory?

A. Knox-Licking.

Q. Are you acquainted with what is known as the Thurston line?

A. As far as the Fairfield County line, I am.

Q. How is that?

A. To the Fairfield County line.

Q. I mean the Thurston four-inch line.

A. I am acquainted with it as far as the county line.

Q. State what you know about its being active or inactive.

A. How is that?
Q. Is it in use?
A. Yes, sir, it is.
Q. Do you know whether it is in use for the full length of it?
A. No, sir.
Q. What portion do you know that is in use?
A. From the Fairfield County line.
Q. What portion is that?
A. South of Hebron.
Q. Can you give that in miles? The court does not know the distances. Not exactly, but approximately.
A. I would judge about eleven miles.
The Court: Eleven miles are in use?
A. Yes, sir. That I know of.

By Edward Kibler: I would like to have the rule enforced
458 as to the exclusion of witnesses. I do not know that it is being violated but I call attention to it.
The Court: Very well.

Q. What is the total mileage of that line, if you know?
A. I don't know for sure.

By Judge Douglass: You may cross-examine.

J. A. SNOKE.

Cross-examination.

Examined by Mr. Roderic Jones:

Q. Mr. Snoke, how is this line in use?
A. By wells—gas wells.
Q. What wells?
A. The Brown wells and Fitch wells, near Hebron, and the Walters well and other wells.
Q. Where are the Brown wells?
A. South of Hebron.
Q. How long has that line been in use, if you know?
A. I couldn't state the time. I helped to lay part of it, on the south end, and it has been in use ever since.
Q. It has been in use ever since it was laid?
A. Yes, sir.
Q. Who uses it?
A. The Logan Company has ever since I worked on it.
Q. And they are using it today?
A. Yes, sir, they are.
Q. Where does this line run from?
A. From Thurston, at one time, but I don't know how far south it extends now.
459 Q. Where to?
A. To Newark.
Q. Where does it come into the Newark City System?
A. I cannot tell you exactly.

Q. Do you know?
A. No, sir, I don't know.
Q. Why don't you know?
A. Well, I don't know. That is all.
Q. Are you familiar with it?
A. Yes, sir. To the corporation limits.
Q. Where does it strike the corporation limits?
A. By the Fair Ground.
Q. By the Fair Ground?
A. Yes, sir, some where there close.
Q. Do you know how long that line has been laid?
A. No, sir, not exactly.
Q. Fourteen or fifteen years anyhow?
A. Yes, sir, I would judge so.
Q. It is nearer twenty isn't it?
A. Well, I don't know. I wouldn't say for sure.
Q. Where is it that the line is in use? You say, from these wells. Now, where to?
A. To Newark.
Q. To Newark?
A. Yes, sir.

By Roderic Jones: That is all.

A. J. DROLET.

Direct examination (resumed).

Examined by Mr. J. R. Fitzgibbon:

Q. Mr. Drolet, have you a statement, or data, showing the net earnings from gas operations and the interest earnings, the
460 dividends paid, and the amount placed to the Newark City plant for betterments for the years 1902 to 1911, inclusive?
A. Yes, sir. Before answering that, may I make a correction in the testimony which I gave yesterday?
The Court: Yes, sir.
A. In Exhibit Q-1, in the fixed charges, depreciation in 1903, 1 and 83/100 cents, instead of 2 and 11/100 cents. The profit on field investment for 1903, 2 and 44/100 cents, instead of 2 and 81/100 cents, making the total cost of gas——

By Edward Kibler: I object.

A. Making the total cost of gas in field for 1903, 7 and 84/100 of a cent instead of 8 and 49/100 of a cent.
By J. R. Fitzgibbon: Now, read my question.
(The Stenographer read the question.)
A. I have.
Q. Will you please read that statement to the court, for the year 1902, first?
A. For the year 1902, the books show, investment in mains of $235,922.27; in fields, $281,883.29; in town, $183,187.96. Total investment in 1902 of $700,993.52, covering main lines, field and

town investment. Total amount of investment at the time the plant was taken over in the present organization by the present stockholders. 1903 showed $216,914.27 in main lines. It showed a sale of pipe that was taken from the main line of $19,008. The pipe was sold to the Logan Natural Gas and Fuel Company. That pipe line was sold in 1903. The field investment in 1903 stood $289,925. Town investment in December, 1902, $214,547.65.

461 By Edward Kibler: That is the town investment?

A. Yes, sir, Total in December, 1903, $721,387.03. In 1904, the main line investment was $216,914.27. The field investment was $292,648.05. The town investment in 1904 was $227,672.44. Making a total, December 31, of $737,234.76.

In 1905, the main line investment was $216,914.27. The field investment in 1905 was nothing. They sold their field properties to the Logan Natural Gas and Fuel Company at book value, $292,648.05. It left the Newark Company with the town investment in 1905 of $242,419.55. Making the total investment of main lines and town lines $459,333.82.

Q. When the field lines of the Newark Natural Gas and Fuel Company were sold to the Logan Natural Gas and Fuel Company did the Logan Company pay cash for them or not?

A. No, sir, they did not pay cash. It bought the lines, and the Logan Company was merely charged with the amount of the lines. It ran for an indefinite time. It was an open account, and earned six per cent interest on that amount of money on that property that it had sold. And it kept on earning that amount until the sale could be wiped out either through dividend or a return of the funds which had been realized from the sale, and it was carried on until the latter part of 1911 when we were advised to clear it off by the Tax Commission of Ohio.

Q. No, go ahead with 1906.

A. Main line, $216,915.27; town lines, $253,268.58. Total in 1906, $470,182.85. In 1907, main line, $216,921.77. In town lines, $251,713.62, making a total investment at the end of 1907, $468,635.39. In 1908, main line, $216,921.77. Town line

462 investment, $255,519.34, making a total investment in 1908 of $472,441.11. In 1909, it showed a main line investment of $37,255.68. In that year, 1909, the Newark Natural Gas and Fuel Company sold to the Logan Natural Gas and Fuel Company all of its main lines except that one stretch of line that goes from Newark to Thurston, a four inch line. And the Logan Natural Gas and Fuel Company bought the rest of their main lines for $179,666.09, for which they did not pay cash; they were charged on their open account. The Logan Natural Gas and Fuel Company just merely bought the properties on credit.

Q. And it paid what interest on that amount?

A. Six per cent on the clearing loan account. In 1909, the town investment was $259,456.93. Making the total investment in 1909 $296,712.61. In 1910, the main line investment was $37,255.68; town lines, $263,282.70, making the total $300,538.38. In 1911, the main line investment was $37,255.68; town lines $265,633.34,

making a total investment, for 1911, in December, $302,889.02. That is the investment feature carried on the Newark Natural Gas Company's books from 1902 to 1911, inclusive.

Q. Does your chart show the amount of gas sold in these various — from 1902 to 1911, inclusive together with the amount received by the Newark Natural Gas and Fuel Company for gas sold?

A. Yes, sir. The books of the company — that the total amount of money received in the City of Newark for gas by the Newark Natural Gas and Fuel Company was, for 1902, $82,390.13.

By Edward Kibler: How much is that?

A. $82,390.13.

463 Q. What was the amount of gas sold?

A. The amount of gas sold was 740,770,000.

By Edward Kibler: Is that in 1902?

A. Yes, sir, that is in 1902. In 1903, the Newark Natural Gas and Fuel Company received, for all gas sold in the City of Newark, $179,342.87.

By Edward Kibler: What was the amount of gas sold?

A. 1,886,326,000 cubic feet.

Q. Now, in 1904?

A. Shall I just give the amount?

By Edward Kibler: Just give the amount.

By J. R. Fitzgibbon: Yes, just give the amount.

A. In 1904, $196,290.50. The number of cubic feet sold: 1,479,562,000 cubic feet. In 1905, $199,399.02. Number of cubic feet: 1,477,564,000. In 1906, $219,508.94. Number of cubic feet: 1,591,875,000. In 1907, $235,389.54. Number cubic feet; 1,640,565,000. In 1908, $212,793.30. Number of cubic feet: 1,434,857,000. In 1909, $218,252.09. Number of cubic feet: 1,456,130,000. In 1910, $235,442.67. Number of cubic feet: 1,477,392,000. In 1911, $252,954.28. Number of cubic feet: 1,505,928,000.

Q. Now, during that time, from 1902 to 1911, inclusive, how much did the Newark Natural Gas and Fuel Company pay for this gas that was consumed in this city?

By Edward Kibler: Do you mean for the whole period?

By J. R. Fitzgibbon: By years.

464 A. In 1902, nothing. In 1903, $77,181.69.

Q. At the same time, can you give the net amount received for gas in these various years, so as to have those two combinations together? Make the subtraction of the amount received and the amount paid out for gas, leaving the net amount to the Newark Company for gas during those six years.

A. I don't understand you.

Q. At the same time that you are giving the amount paid for gas in the various years, state the net amount received by the Newark Natural Gas and Fuel Company for gas. That is, the total amount that they received for gas, less the amount that they paid out.

A. It required going over old records in the Pittsburgh office of the Logan Company as well as the Newark Company to ascertain the figures in 1903, and possible 1904; but from 1905 on, I have the records here to show. In selling gas, they would sell on a basis of

say seventy per cent, and charge the distributing company with seventy per cent of the money; and take seventy per cent of the cubic feet, too, and in that way it destroyed all the details for a proper compilation, and it necessitated going over the records of the different companies and ascertaining for our own information. The amount of money is just as is shown on the Newark Natural Gas and Fuel Company's statement.

Q. Now, the price paid by the Newark Company for gas sold by them in the City of Newark: That amount, you said, in 1903, was how much?

A. $77,181.69. In 1910, $122,010.53. In 1905, $142,914.37. In 1906, $153,674.55. In 1907, $164,794.98. In 1908, $149,054.05. In 1909, $152,785.71. In 1910, $164,809.89. In 1911, $177,-068.02.

465 Q. What does that show was the net amount received by the Newark Company for gas during those various years——

A. The net amount received for gas by the Newark Natural Gas and Fuel Company in the City of Newark for all gas was, in 1902, $82,390.13. In 1903, $102,161.18. In 1904, $74,279.97. In 1905, $56,484.65. In 1906, $65,834.39. In 1907, $70,594.56. In 1908, $63,739.25. In 1909, $65,466.38. In 1910, $70,632.78. In 1911, $75,886.26.

Q. During those years, did the Newark Natural Gas and Fuel Company receive any funds or money in any other way than by gas sold?

A. Yes, sir. There are funds that came in under the head of meter rentals, and meter forfeitures; they can be justly called gas earnings. They are contingent upon the sale of gas; the amount is small, but it is always considered as belonging to the earnings of the company.

Q. What did the Newark Company earn in that way for these years?

By Edward Kibler: What do you call that?

A. Miscellaneous earnings from gas operations. In 1902, nothing; in 1903, $233.35. In 1904, $751.75; in 1905, $7,093.25. In 1906, $5,095.20. In 1907, $11,963.85. In 1908, $3,675.65. In 1909, $72.80. In 1910, nothing. In 1911, nothing. Those amounts are comprised mostly of meter rentals. We had a basis upon which we received meter rentals, and that was abolished in 1909.

Q. And that statement shows the total earnings, as how much?

A. In 1902, $82,390.13. In 1903, $102,394.53. In 1904, $75,-041.72. In 1905, $63,577.90. In 1906, $70,929.19. In 1907, $82,-558.41. In 1908, $67,414.90. In 1909, $65,593.58. In 1910, $70,-632.78. In 1911, $75,886.26.

466 Q. What were the operating expenses of the Newark plant during those years?

By Edward Kibler: Was that the total earnings?

A. Yes, sir. Total earnings from gas operations from all sources in the City of Newark by the Newark Natural Gas and Fuel Company.

By Edward Kibler: Is that gross earnings?

A. I don't know whether you could term them gross earnings or not.

By Edward Kibler: I should say: Gross receipts.

A. Yes, sir, the gross receipts of the Newark Company.

Q. What were the operating expenses of this company during those years?

A. This includes also the general expense. Not only in operating the lines, but running the office and legal expenses.

Q. All expenses necessary to the business?

A. Yes, sir. As the books show that they were incurred. In 1902, $12,922.74. That is for part for 1902. It only covers the portion of the year in which the company operated in connection with the Logan Company.

Q. Do you know about what time in the year that connection was made between the Logan and the Newark Company—that is, by which the Logan Company was furnishing gas to them?

A. I couldn't tell you accurately. I think in the month of August, 1902, when we took full charge of the Newark Company here.

Q. Well, go ahead.

A. In 1903, $38,657.74. In 1904, $44,789.78. In 1905,
467 $35,106.24. In 1906, $22,743.16. In 1907, $22,073.96. In 1908, $23,739.30. In 1909, $30,533.56. In 1910, $25,931.79. In 1911, it was $27,281.50.

Q. Now, are you able to show the net earnings from gas operations by the Newark Natural Gas and Fuel Company?

A. Yes, sir, in 1902, $69,397.39. In 1903, $63,736.79. In 1904, $30,251.94. In 1905, $28,471.66. In 1906, $48,186.03. In 1907, $60,484.45. In 1908, it was $43,675.60. In 1909, it was $35,060.02. In 1910, $44,700.99. In 1911, $48,604.76. That is the net earnings from gas operations.

Q. What does that aggregate for the years 1902 to 1911, inclusive?

A. Net earnings to 1911, inclusive, amounts to $442,569.63.

Q. During that time did this company receive anything in the way of interest earnings?

A. Yes, sir, interest earnings on the property sold, and through the clearing account. All the money was put into a clearing account and they received six per cent interest on it until the proper dividend should be declared.

Q. I wish you would give those figures?

A. Interest earnings for 1902, $1,167.07. In 1903, $7,797.36. In 1904, $5,991.25. In 1905, $2,798.97. In 1906, $19,926.47. In 1907, $9,031.35. In 1908, $9,347.17. In 1909, $19,070.13. In 1910, $29,207.69. There was nothing 1911. When that was $29,000 interest, the Tax Commission advised us to pay dividends.

Q. That shows the total amount received as what?

A. $104,337.46, from 1902 to 1911, inclusive.

Q. During that time, what dividends were paid, and when,
468 by the Newark Company?

A. In 1904, $180,000.

By Edward Kibler: How much?

A. $180,000. In 1909, $204,000. In 1911, $600,000.

Q. Making a total amount of what?

A. $984,000. That is the only way we could clear that account of that excess. That is the only way you could clear the account.

Q. Do we understand that the amount of money that the Logan Company owed the Newark Company together with the interest charges on the same was cleared by way of dividends?

A. Yes, sir. The amount of property that was sold created in their coffers a certain amount of cash that was represented by a loan account. The Logan Company had not paid cash for it. And this property that was sold was allowed to accumulate interest on it, and it was not re-distributed back to the stockholders, but was allowed to accumulate. In 1911, we attempted to clear that property of the amount itself, and the interest that had accrued on it.

Q. Now, I wish you would state whether or not the $600,000 dividend declared in 1911, together with the $204,000 dividend declared in 1909, represented dividends from actual gas operations in the City of Newark?

By Edward Kibler: I object. It is leading.

The Court: The witness may state the facts.

The Witness: From the gas operations, the net earnings show, in the ten years, $442,569.63.

469 By Edward Kibler:

Q. How much is that?

A. $442,569.63.

Q. The total amount of dividends declared, aggregated $984,000?

A. Yes, sir.

Q. The total amount received from gas operations during that period aggregated $442,569.63?

A. Yes, sir. But that was not all available cash.

Q. Why not?

A. Because we used $82,000 of that for the betterment of the plant.

Q. In what years was that $82,000 used?

A. In 1903 betterment to the local plant—this is all betterments—nothing in 1902—in 1903, $31,359.69. In 1904, $13,124.79. In 1905, $14,747.11. In 1906, $10,849.03. In 1907, we sold material out of the local plant and gave the plant a credit in that year of $1,554.96. That is, a credit to the plant on account of materials that were sold. In 1908, to betterments, $3,805.72. In 1909, $3,937.59. In 1910, $3,825.77. In 1911, $2,350.64.

Q. Making the total amount for betterments in what sum?

A. $82,445.38.

Q. Now, I wish you would state to the court what amount was available for dividends during these periods from actual gas operations by the Newark Gas Company.

By Edward Kibler: I object.

The Court: He may answer.

By Edward Kibler: Note an exception.

470 A. The amount available for dividends, from gas earnings, from gas operations in the City of Newark, from 1902 to 1911, inclusive, is $360,124.25.

By Edward Kibler: I move to rule out that answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

By J. R. Fitzgibbon: Did I understand your Honor that certain matters in this were not clear to the court?

The Court: I think it is clear now. I understand it better now than I did.

Q. Will you state what the difference represented by the total amount of dividends paid—amounting in all to $984,000—and the net amount received from gas operations, available for dividends—amounting to something — $360,000 during these periods—state what that difference represented; and what property did it represent? I don't care for it in dollars, but what did it represent in property?

A. All dividends are declared from the surplus.

Q. Where did it arise?

A. In the beginning there was a large surplus created from the fact that there was $700,000 worth of property in the field and town, and there was only $81,000 of capital stock to cover it; and when the company was taken over by the present organization, it had taken over a capital stock of only $81,000, and also a big surplus account.

471 Q. This chart shows that this company declared dividends amounting in the aggregate to $984,000.

A. Yes, sir.

Q. And the chart further shows that the total amount available for dividends from gas operations in the City of Newark during this period was something like $360,000?

A. Yes, sir.

Q. And that leaves a difference of about $600,000?

A. Yes, sir.

Q. Now, I would like to know what that difference represented, or how it was obtained by the Newark Company. State whether that represents——

By Edward Kibler (interrupting): I object. It is leading.

The Court: State what that represents.

A. $984,000 of dividends; and the net amount available from gas operations was $360,124.25, which leaves $623,875.75.

The Court: How much?

A. It leaves $623,875.75, of which $480,968.75 represented the sale of properties——

By Edward Kibler (interrupting): How much is that

A. $480,968.75.

The Court: Sale of properties?

A. Yes, sir, the sale of properties. And that left $142,907. And $104,000 of that was represented by interest earned on account of

the sale of the property. And that leaves $38,570 from the former surplus earnings.

472 Q. Now, I will ask you if you have prepared a statement showing the earnings and expenses of the Newark Natural Gas and Fuel Company upon the basis of having held their original field interest and investment, and operated the same independent of the Logan Natural Gas and Fuel Company?

A. Yes, sir, I have.

Q. Will you show what that is?

By Edward Kibler: I object to that. That is a pure speculation.

The Court: Independent of the Logan Company?

By J. R. Fitzgibbon: Yes, sir, independent of the Logan Company. I want to show what the earnings and expenses of this company would have been if they had operated as a producing as well as a distributing company. I want to show this for the purpose of showing the expenses and the net return in the way of profit, which would have accrued to the Newark Company if it had operated as a producing and distributing company, and having the same advantages as the Logan Company has had, and having, as a distributing company, of course, the advantages that it actually did have during these years.

(After argument of the question:)

The Court: I will sustain the objection. I am unable to see how this kind of evidence can aid the court in determining the reasonableness of the rate. You may show all the facts that directly or indirectly enter into the cost of producing or distributing the gas.

473 By J. R. Fitzgibbon: Well, I do not care to pursue the matter any further.

The Court: The objection is sustained.

Q. Now, in figuring the operating expenses for the City of Newark, I will ask you whether or not you allowed anything for depreciation during that period.

A. Depreciation is not an item that comes in under operating or in deduction for expenses. It is an item that comes off of net earnings from gas operations.

By Edward Kibler: I would like to hear the question answered.

A. No, sir.

By Edward Kibler: You say you allowed nothing.

A. No, sir.

Q. What would be a fair allowance for depreciation of the Newark plant during these years?

By Mr. Bolton: I object to that.

The Court: Well, we will sustain the objection.

By J. R. Fitzgibbon: We except to the ruling of the court and offer to prove——

The Court: I am not holding that you cannot show the depreciation of this plant. The question bothering the court is whether this witness has sufficient knowledge.

By J. R. Fitzgibbon: Well, I will qualify the witness.

474 Q. What experience have you had in knowing the expenses incident to the operation of distributing natural gas plants?

By Edward Kibler: I object.

Q. Do you know what the depreciation of a distributing natural gas plant would be?

By Edward Kibler: I object to that. That is not the way to qualify him.

The Court: He may answer.

By J. R. Fitzgibbon: Read the question.

(The stenographer read the question.)

A. The knowledge that I would have of the depreciation of a natural gas plant in this city, is the knowledge such as an auditor would be put in contact with in knowing the results from other men, and attending conferences at which these matters were discussed, and the general per cent considered as a fair depreciation charge.

By Edward Kibler: I move to rule out the answer.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

Q. Have you had any other actual experience in the operation of a distributing plant?

A. Do you mean the outside work—operating the lines?

475 Q. Yes, sir.

A. No, sir. The limit of my experience has been in making gas inspections of local plants. That has been incidental to my work; and checking up consumers to see that there were no by-passes and that their flues were well connected. And in making a report and checking it with the local books. Outside of that, my experience has just been incidental.

Q. What experience have you had along that line?

A. I inspected two or three plants, for about four months or so.

Q. You spent four months at that?

A. Yes, sir. It takes about six weeks to a plant of any size at all to make a proper inspection.

By J. R. Fitzgibbon: I think he is competent to testify upon this proposition.

The Court: I do not think he is qualified. This witness is the auditor of the company. He is an expert accountant—bookkeeper.

Q. I will ask you if there is any rule applied by any state board or commission in reference to the allowance for the depreciation of a distributing plant.

By Edward Kibler: I object.

The Court: I will sustain the objection.

271

By J. R. Fitzgibbon: I wish an exception and I offer these various charts in evidence.

476 By Edward Kibler: I object. As to some of them, the court has ruled out all the testimony in reference to them.

By J. R. Fitzgibbon: I mean the ones used. These were marked yesterday (indicating) but were not introduced. They are charts marked P, Q, and R.

By Edward Kibler: We object to them. We ask to exclude them all, and especially as to the allowance of those pertaining to the affairs of the Logan Natural Gas Company.

The Court: The objection is overruled.

By Edward Kibler: Note an exception.

By J. R. Fitzgibbon: I am simply offering these which were marked for identification yesterday, and this chart this morning which has not been marked yet, but which had better be marked Exhibit S.

(The stenographer marked the chart Exhibit S, as requested.)

(A true copy of said chart S, is hereto attached, made part hereof.)

By J. R. Fitzgibbon: And I offer P, Q, R, and S.

(True copies of P, Q, R, and S, are hereto attached, made parts hereof.)

477 Q. Have you figured out or estimated the cost of distributing natural gas to domestic consumers in the City of Newark?

A. I have no figures compiled on that. I can give them to you from the record here, if you desire.

Q. I wish you would make an estimate of the cost of distributing for domestic consumption in this City.

By Mr. Jones: Well, isn't that in already.

By J. R. Fitzgibbon: I mean the cost per thousand cubic feet—on the basis of a thousand cubic feet.

A. The exact cost of domestic consumption would be impossible to tell from the records that I have, because I show the total gas sold without any division between the domestic and special, but I can give it to you approximately.

By Edward Kibler: What do you mean by special?

A. Gas that goes to manufacturers.

Q. Do you know approximately, the amount of gas consumed in domestic consumption in this city?

A. In 1912 it amounted to about 930,000,000; domestic.

The Court: Do you mean for 1911?

A. No, sir, for 1912.

By J. R. Fitzgibbon: Do you know what it was in 1911?

A. In 1911, it was 904,000,000.

Q. On the basis of distributing 940,000,000 cubic feet of gas to domestic consumers in Newark, I wish you would give the court the cost per thousand feet.

A. Do you want me to use my estimate on the basis of the year 1912?

478 Q. Well, I would rather have the year 1911, if you can furnish it on the basis of that year.

A. Well, I will try and give you both of them. 7 and 1/100 cents for domestic gas alone.

The Court: Did you say 7 and 7/100 cents?

By Edward Kibler: No, 7 and 1/100 cents.

The Witness: 7 and 1/100 cents. That does not take into consideration any special gas.

By Edward Kibler: What year is that?

A. That is 1912; computed upon the book investment of December, 1911, on the basis of five per cent depreciation. In the City of Newark alone.

By Edward Kibler: I move to rule that out.

The Court: The motion is overruled.

By Edward Kibler: Note an exception.

By J. R. Fitzgibbon: I wish to offer in evidence the contract enteered into on the 24th day of March, 1904, by and between the Logan Natural Gas and Fuel Company, a corporation duly incorporated under the laws of the State of Ohio, party of the first part, and the Newark Natural Gas and Fuel Company, a corporation duly incorporated under the laws of the State of Ohio, party of the second part. It provides for the sale of gas by the Logan

479 Natural Gas and Fuel Company, party of the first part, to the Newark Natural Gas and Fuel Company, party of the second part, for the period of ten years from the 1st of March, 1903, or such part of said term of ten years as the party of the first part shall have a sufficient supply of natural gas from its gas field or territory to supply the demand in the City of Newark.

I wish the stenographer would make a copy of it so that the original may be restored to our files. It simply fixes the basis of seventy per cent and thirty per cent between the two companies. The Logan Company to receive seventy per cent of the total amount received by the Newark Company, and the Newark Company thirty per cent.

By Edward Kibler: Does that apply to special as well as domestic consumption?

By J. R. Fitzgibbon: Yes, sir.

And the contract further provides that not less than twenty-five cents per thousand cubic feet for domestic consumption is to be charged to the citizens of this city. I wish to make that statement because, in all probability, we will have some testimony in reference to that fact.

By Edward Kibler: Nor less than six cents per thousand cubic feet for gas sold to be used for manufacturing purposes.

By J. R. Fitzgibbon: Yes, sir.

480 By Edward Kibler: The Logan Company to have seventy per cent and the Newark Company thirty per cent. Is that the way of it?

By J. R. Fitzgibbon: Yes, sir.

By Edward Kibler: The Logan Company gets the seventy per cent.

By Mr. Bolton: Yes, sir.

(Said paper was here marked by the stenographer, Exhibit T.)

(A true copy of said paper, made part hereof, is as follows:)

"T."

"This agreement made and entered into this 24th day of March, A. D. 1904, by and between The Logan Natural Gas and Fuel Company, a corporation duly incorporated under the laws of the State of Ohio, party of the first part, and The Newark Natural Gas and Fuel Company, a corporation duly incorporated under the laws of the State of Ohio, party of the second part, witnesseth:

"Said part- of the first part, for and in consideration of the covenants and agreements of said party of the second part hereinafter set out, covenants and agrees to and with said party of the second part, that it, the said party of the first part, will furnish and deliver to said party of the second part through the receiving and regulating station heretofore constructed by it, the said party of the first part, at or near the corporate limits of the City of Newark, in the
481 County of Licking, in the State of Ohio, natural gas in sufficient quantities to maintain a pressure not to exceed four ounces on the low pressure line in said city, and to supply the said city and all customers and consumers, public and private, that can be secured by said party of the second part in said city, with such gas for light, fuel and any and all other purposes, for and during the term of ten years from the 1st day of March, 1903, or such part of said term of ten years as said party of the first part shall have a sufficient supply of natural gas from its gas field or territory to supply the demand therefor in said City of Newark and in such other cities, towns and villages in the State of Ohio, as may be supplied with such gas by it, the said party of the first part, it being expressly understood and agreed by the parties hereto that said party of the first part reserves to itself the right to make contracts for furnishing natural gas to other cities, towns and villages in Ohio and the inhabitants thereof, as fully as if this contract had not been made.

"Said party of the first part further covenants and agrees to use reasonable care and diligence to supply the natural gas required by said party of the second part for its customers and consumers and to use reasonable care to keep its mains and pipes in a serviceable condition and to repair the same as soon as possible in case of accident or any break or breaks therein, but it is in no event to be held liable for any loss or damage to said party of the second part, or to any other person or persons, corporation or corporations, that
482 may occur through its failure to supply gas by reason of any such accident or break or breaks in its said pipe line.

"Said party of the second part, in consideration of the covenants and agreements of said party of the first part, hereby covenants and agrees to and with said party of the first part, to procure, construct, maintain and operate during the continuance of this contract, pipe

lines in, through and along such streets, avenues, alleys and public grounds in said City of Newark as the business of the said party of the second part may demand, large enough to supply said city and all of its inhabitants who may desire to purchase and use natural gas for any purpose, with such gas; to construct and maintain all connection and service pipes; to keep said lines and pipe connections in good repair and serviceable condition; to make proper connections with and attachments to the pipe line of said party of the first part at said receiving and regulating station of it, the said party of the first part; to locate and furnish an office at some convenient point; to employ and pay all necessary clerks, and other employes required to conduct and carry on the business of furnishing and supplying natural gas to all customers and consumers in said city; to make all contracts for supplying natural gas to all customers and consumers and all connections for gas supplied to such customers and consumers; to use its best endeavors to secure customers and consumers and to build up and extend said business, by advertising, soliciting by agent or otherwise; and to do all things necessary to manage and conduct said business and furnish natural gas to all customers
483 and consumers in said city during the continuance of this contract.

"Said party of the second part further covenants and agrees with said party of the first part to use first class material in the construction of its pipes and other work, and to construct the same in a good and workmanlike manner; to assume all expense, cost, labor and risk incurred in the construction, operation and management of said service lines and business within the corporate limits of said City of Newark, from its connection with the pipe line of said party of the first part, to pay all taxes and assessments of every kind whatsoever on all of said property in said city.

"It is further covenanted and agreed by and between said party of the first part, and said party of the second part, that the prices to be charged and collected for all natural gas furnished and sold to customers and consumers within said City of Newark under this contract during the continuance of the same shall be regulated and fixed by said party of the first part, but that the price to be fixed shall in no case be less than twenty-five cents per thousand cubic feet, subject to a discount of ten per cent on the price charged, for all gas sold to be used for domestic purposes, when payment thereof is made on or before the 10th day of each month, nor less than six cents per thousand cubic feet for gas sold to be used for manufacturing purposes, that all contracts made by said party of the second part for furnishing gas for manufacturing purposes shall be made in writing and shall contain a provision authorizing said party of the
484 second part to shut off the supply of gas at any time without any notice whatever; and that said party of the second part shall pay to said party of the first part at the general office of said party of the first part, wherever the same may be located, on or before the fifteenth day of each and every month during the continuance of this contract, seventy per cent of the gross amount or sum of money received for all gas sold during the preceding month,

and that it shall have and retain for itself the remainder of said gross amount or sum of money so received for gas sold during said preceding month.

It is further covenanted and agreed by and between said party of the first part and said party of the second part that said party of the second part will do, or procure to be done, all plumbing necessary to make house and service connection for consumers at a reasonable price or rate; furnish all mixers to be used by consumers, at a reasonable price or rate; require all plumbers to procure a permit and mixers at its office before making any house connections for fires, or service with the pipe lines of the said party of the second part; require all consumers to sign a contract in triplicate for gas, before house connections are made with its pipe line, or gas is turned into the house or service pipe of such consumer; require all consumers to sign additional contracts for any additional fires or mixers obtained, and plumbers to procure permits at its office before making connection for such additional fires or service; and require the numbers of all mixers to be included in and endorsed on all contracts for gas, and further that it, the said party of the second part, will forward
485 to said party of the first part, as soon as made, a copy of all contracts with consumers and will make and keep in its office a copy of each of such contracts, together with a full and complete record of the same and of all mixers used, and will, also, keep at its said office such books of account as will clearly and fully show all accounts and contracts with consumers, and all other transactions and matters relating to the business of it, the said party of the second part, which said accounts, books, contracts and records, together with any and all other papers relating to or connected with the business and matters of it, the said party of the second part, under this agreement and contract, shall be, at all reasonable and proper times, day and night, open to examination and inspection by the officers, agents, attorneys and employes of the said party of the first part, and that it, the said par-y of the second part, will, by its officers, agents and employes, aid and assist said officers, agents, attorneys and employes of said party of the first part in making such examination and inspection whenever requested to do so by them.

It is further covenanted and agreed by and between said party of the first part and said party of the second part that said party of the second part will, at the end of each and every calendar month during the continuance of this contract deliver to said party of the first part, at the general office of said party of the first part, a statement showing in detail the amount collected for gas sold and delivered to consumers during said month.

"It is further covenanted and agreed by and between said
486 party of the first part and said party of the second part that if said party of the second part, shall, for a period of thirty days, neglect and fail to pay the said party of the first part any money due to it under this contract or shall neglect and fail to faithfully and fully perform each and every covenant and agreement herein stipulated to be performed by the said party of the second part, this contract shall, at the option of said party of the first part, be [illegible]-

celled and annulled and all rights of said party of the second part hereunder forfeited, and said party of the first part, shall in such case, have the right to enforce by action, or actions, at law or in equity, the payment of any money due or to become due to it, the said party of the first part, and any and all claim or claims for damages, or other claim or claims that it, the said party of the first part, may have against said party of the second part, by reason of the premises.

"And it — further covenated and agreed by and between said party of the first part and said party of the second part, that all of the covenants, agreements, and stipulations hereinbefore set out to be kept and performed by said party of the second part, shall be binding upon and enforceable against its successors and assigns, by said party of the first part, its successors and assigns, and that all of the covenants, agreements and stipulations hereinbefore set out to be kept and performed by said party of the first part shall be binding upon and enforceable against its successors and assigns, by said party of the second part, its successors and assigns, and that no assignment of this agreement shall be made by said party of the second part, its successors and assigns, without the consent in writing of
487 said party of the first part, its successors and assigns.

"In testimony whereof, the said The Logan Natural Gas and Fuel Company has hereunto caused its corporated name and seal to be signed and affixed by Jesse C. McDowell, its president, and Hugh P. Brawley, its secretary, and the said The Newark Natural Gas and Fuel Company has hereunto caused its corporate name and seal to be signed and affixed by Samuel A. Wheeler, its president, and Robert P. Miller, its secretary, on the day and year first hereinbefore written and set forth.

"THE LOGAN NATURAL GAS AND FUEL COMPANY.
By JESSE C. McDOWELL, *Its President.*
HUGH P. BRAWLEY, *Its Secretary.*

[Seal The Logan Natural Gas and Fuel Company.]

THE NEWARK NAT. GAS & FUEL CO.,
By S. A. WHEELER, *Its President.*
R. P. MILLER, *Sec't'y.*"

[Seal The Newark Natural Gas & Fuel Company.]

Q. What has been the result to the Logan Natural Gas Company from operating under this contract in the last five years?

By Mr. Jones: I object.

The Court: The figures show what the result has been.

By J. R. Fitzgibbon: Well, I think so, too. It is simply a matter of deduction. But probably he would be able to give it in a more concrete form.

488 The Court: We will sustain the objection.

Q. Do you know whether or not the Newark Company has any producing gas wells?

A. At the present time, do you mean?
Q. Yes, sir.
A. No, sir; they have not.
Q. How was it in the year 1911? Did they have any producing wells?
A. No, sir; they did not.

By Mr. Jones: There is no dispute about that, is there?
By J. R. Fitzgibbon: Well, it will be conceded that the Newark Natural Gas and Fuel Company has no producing wells, but is simply a producing company. You may take the witness.

A. J. DROLET.

Cross-examination.

Examined by Frank A. Bolton:

Q. How long have you been connected with the Union Gas Corporation?
A. Four years ago; the 1st of January, 1909.
Q. Prior to that time, what was your position?
A. I was assistant auditor of the Wichita Gas Company, for a year and a half before that.
Q. At Wichita, Kansas?
A. Yes, sir; at Wichita, Kansas.
Q. And prior to that, where were you?
A. I was, prior to that, fourteen months as bookkeeper and cashier of the United Gas Company, the Edison Light and Power
489 Company, and the Wichita Artificial Gas Company—a consolidation of three companies, and I was cashier of all three companies.
Q. Where was that located?
A. At Wichita, Kansas.
Q. Where were you before that?
A. I was at Oklahoma City for a year and a half. And acted in the capacity of four or five positions.
Q. Prior to that time, where were you?
A. I was in college.
Q. And your connection with the Union Gas Corporation commenced in 1909?
A. Yes, sir; in January, 1909.
Q. And all that you know about the figures produced by you here in reference to the earnings and investments of the Newark Company are simply from what you gained by access to the books of the Union Gas Corporation?
A. My work with the Union Company was to go into the old accounting, back in 1902; that was the first work that I undertook; going back into the old work. I haven't gone all over it, but in that way I have gained some knowledge.
Q. But you did that in an accounting way?
A. Yes, sir.

Q. You had no personal knowledge of the conduct of the business prior to that time?
A. No, sir.
Q. What is the capital stock of the Logan Company?
A. Ten million dollars.
Q. Is all issued?
A. Yes, sir; it is all issued.

Q. What was the capital stock of the Logan Company in
490 1911?

A. In December, 1911, it was ten million dollars.
Q. In 1910, what was it?
A. In 1910, it was forty thousand dollars.
Q. From the organization of the company up until 1911, when the company was further capitalized, the capital stock remained at forty thousand dollars, did it?
A. Yes, sir. It remained at forty thousand dollars.
Q. When was the Union Gas Corporation organized?
A. I cannot tell the year. I cannot recollect it.
Q. About what year was it?
A. I think in 1892, or 1894.

By Edward Kibler: Well, is that correct, gentlemen?
By Judge Douglass: It was about 1889, or 1890.

Q. I want you to give me the investment of the Logan Company in 1904?
A. As we carry them on our books?
Q. Yes, sir. The Logan Company in 1904. What you call the Logan Company. In 1904.
A. I cannot give the enumeration for 1904——
Q. Well, give me the total investment.
A. In December, 1904—well, I cannot give you that, either. I can give the total field investment for 1904. I can give, approximately, the total investment, if that will do.
Q. If you do not miss it by three or four million?
A. No, I won't miss it by any amount like that.

(The witness figures.)

A. In December, 1904, the investment was approximately $7,-
024,434.94.

491 Q. Give me the investment for 1905?

A. December, $7,881,102.92.
Q. Now, what was it in 1906?
A. $8,370,391.49. I am giving the figures of the distributed investment. There are some items of new lines and warehouses and teams and things which are carried in open accounts, which are not distributed. I am giving the net amount that is accounted for.
Q. Can you give me the field investment for 1904?
A. For 1904, it was $3,336,893.81.
Q. In 1905, what was it?
A. We carry the fields separately. Every field is accounted for separately.

(The witness figures.)

A. In 1905 the field investment was $3,933,729.93.
Q. Now, give it in 1906—the field investment?
A. $4,380,167.55.
Q. Give me the field investment in 1909?
A. In 1909 it was $5,296,623.26.
Q. What was the total investment in 1909?
A. The total investment was $9,719,845.35.
Q. I want you to tell me the different items which enter into your computation of field cost per thousand cubic feet—the Logan Company?

A. This is the Logan Company in 1903 and 1904—I can give the maintenance expense of the different fields.

Q. Well, I want the items as you have them. I want the items from which you make up your percentage?

A. In 1903, a total field expense of maintenance and operation, $255,704.95.

Q. You don't understand my question. My question is:
492 What are the items that produce that expense?

A. They are changing construction, repair of lines, repair of wells. Repair of meters; the labor in drilling new wells and miscellaneous maintenance expense—small features. Now, in the operating expense comes the operation of the lines. In 1903 and 1904; I have not the distribution made. I can give the total maintenance and the total operating expense in each field from 1905 on. I can give every year from 1905 on.

Q. In the second item which you have in 1903, you have a charge of 1 and 1-100 of a cent. I want to know what is included in that?

A. Operating lines; operating wells; rental on leases; taxes on fields; damages; tools and supplies in the fields; telegraph and telephone; office expenses in the fields; salary and expenses of officers and superintendent; and field superintendents. Legal expense; miscellaneous; pumping stations; warehouse expense; auditing expense. That is distributed to each field.

Q. Where you make a charge of 1 and 84-100, what are the different items that make that up?

A. Changing construction in the field and repairing lines in the field and wells; and any buildings that we may have in the field; repair of telegraph and telephone lines, and repair of meters; labor; drilling the wells; maintenance expense; and we show $165,497.04 as the total maintenance expense on the Homer and Sugar Grove fields. I can give them separately, if you want them, in the separate fields. That produced from our fields 9,016,000,000 cubic feet, or, that expenditure of $165,000 was the cost of producing those 9,016,000,000 cubic feet, which amounted to 1 and 84-100 of a cent.

493 Q. Now, you have field expense of 72-100 of a cent. What makes that up?

A. There is a certain amount of the expense that is contributed towards the field operation; that is, the management and all that;

and I have taken all the gas that we have sold; general expense in 1903, $66,128; and in that year our total sales were just a little over 9,203,000,000. That made the total field expense of about 72-100 of a cent.

Q. What was the additional investment from 1905 to 1906?

A. Do you mean from January, 1905, to January, 1906?

Q. Yes, sir.

A. Do you mean how much we put in the field during that *your*?

Q. Yes, sir. How much was the field investment?

A. We put in the fields $596,836.12.

Q. For what purpose was that?

A. Anything above 1905 I can testify to the increase.

Q. Well, give it to me in 1905.

A. Well, that is 1905—$596,836.12.

Q. Well, give me 1906?

By Edward Kibler: This is the additional field investment?

A. Yes, sir; the additional field investment for that year. In the year 1906, we put into the fields $446,437.62. Of that, about $677.35 in the Homer field, went for the purchase of lands. Here (indicating) is the Homer field in 1905, and here it is in 1906.

Q. Can you give me the items that make that up?

A. It consists of two fields. Lands in fee; mineral and gas rights; leaseholds, about $1,000. The material in the gas and oil
494 wells, about $56,000; rights of way about $4,000; rights of way expense, about $1,700; building about $60; large fittings on field lines, about $20,000; small fittings about $600. Other materials in lines, about $400; labor in laying lines, about $23,000; gas receivers and regulators, $109; gas meters, about $1,300; addition to pumping station, about $94,000; material in pipe lines, $116,000—just the pipe itself. That is the Homer field. $369,155 went to the Homer field. Do you want me to give the items of the Sugar Grove field?

Q. Yes, sir. Enumerate the items.

A. About $1,000 in leaseholds, about $3,000 in materials for oil wells; about $1,400 for rights of way; about $400 for rights of way expense; about $30 for buildings; large fittings, about $400; small fittings about $50; other materials: No charge. Labor in field investment, $6,000; gas meters, $400; pumping station—additional material—$40,000; pipe for field lines $23,000.

By Edward Kibler: What is the total?

A. $77,282. That went into the Sugar Grove field.

By Mr. Bolton: Can you give me your monthly production of gas from the 1st of May, 1908, to the 1st of May, 1909?

A. No, sir, I couldn't give the monthly production, but I can give the yearly production. I suppose I could get that information, though. But it would take an enormous lot of records to get it—to have it verified. I have taken just each year's record.

495 Q. Will you first give a statement of the earnings of the Logan Company?

A. Yes, sir.

Q. And the investment from the time of its organization to the present time?

A. No, sir; but I can from the time of the reorganization in 1902.

Q. In 1902?

A. Yes, sir. I know that there are no records in Pittsburgh that would deal with anything back of 1902.

Q. And the dividends—of the Logan Company?

A. Yes, sir. Do you want me to given you that now?

Q. Yes, sir. Have you a statement of it prepared?

A. I have the figures here from 1905.

Q. If you can give me a statement of it, it will be sufficient.

The Court: Anything that you want from the witness between now and next Monday——

By Mr. Bolton: Well, I went an actual statement of the business of the Logan Company as it has been conducted, and no theoretical chart.

By J. R. Fitzgibbon: I object to that statement—theoretical chart.

A. Anything that I give you, you will be able to check it up right here.

By Mr. Bolton: All that I want is the fact.

The Court: Can you furnish that by Monday?

A. It is a pretty big job. I have got to go back home tonight. I will not have much time. After you are through cross
496 examining me—but I do not know whether you want to use that in cross examining me or not——

By Edward Kibler: Well, we want it by Monday morning.

By J. R. Fitzgibbon: Would you be able to make that up by Monday morning?

A. Well, I guess I could, but it would be an awful inconvenience for me to make it by Monday. I will try it. I will do what I can for you.

Q. You can furnish it from 1902 on?

A. Yes, sir; I can do that for you.

By Edward Kibler: You might send word to your office—why not have it made up there?

A. I hate to make statements that I have not the figures for, especially if you are going to cross examine me about them.

By Edward Kibler: Well, I want you to enjoy your Sabbath.

The Court: Do the best you can.

A. Yes, sir; I will do the best I can to get it out by Monday.

By J. R. Fitzgibbon: It was requested that Mr. Wyer give the number of wells that are on a certain chart——

By Edward Kibler: Well, we have that now. I don't care about it now. As far as that is concerned, we have that now, and we have the chart here.

497 By J. R. Fitzgibbon: You have the number, have you?

By Edward Kibler: Yes, sir; it is in the evidence.

By J. R. Fitzgibbon: The number of wells?

By Edward Kibler: Mr. Henderson testified about that.

By J. R. Fitzgibbon: That chart included not only the wells of the Logan Company, but also the wells of other companies. Mr. Henderson's testimony was solely in reference to the Logan Company.

By Edward Kibler: The Logan Company's wells are marked with a certain color on the chart.

By Mr. Montgomery: Those which are abandoned and those which are in active operation, are differently marked.

By Judge Douglass: Mr. Wyer is a witness in a case in Joplin, Missouri, and we want to excuse him—Monday, Tuesday and Wednesday.

The Court: Is there any objection to excusing him?

By Edward Kibler: I do not think we have any.

Mr. Henderson was asked to make a statement showing the number of wells in the Logan territory which registered over 150 pounds. I wish to ask him some questions.

498 JOHN HENDERSON (Recalled).

Examined by Edward Kibler:

Q. Is this paper correct, Mr. Henderson? (Hands paper to the witness.)

A. Yes, sir.

(Said paper was marked No. 4.) (A true copy of said paper, marked No. 4, is hereto attached, made part hereof.)

By Edward Kibler: It says: The number of wells having a rock pressure of 150 pounds, or more, 135; number of wells having a rock pressure between 150 and 75 pounds, 118; number of wells having a rock pressure of 75 pounds or less, 60. Total number, 313.

Number of wells in which rock pressure was not taken, 22. Wells were too wet and could not be shut in long enough to get rock without drowning out.

Number of wells not tested, 5.

Making a total of 340.

Number of wells with a rock pressure greater than 150 pounds, determined in compliance with Mr. Kibler's request.

Number of wells with a rock pressure less than 75 pounds, determined in compliance with Mr. Fitzgibbon's request.

I wish to make that a part of his testimony.

(Said paper was, as before stated, marked No. 4.)

(Here court adjourned until 9 o'clock Monday, March 3, 1913.)
(One o'clock, P. M.)

499 Mr. DROLET.

Cross-examination (resumed).

Examined by Frank A. Bolton:

Q. Mr. Drolet, did you prepare an exhibit of the expenses and the earnings and dividends of the Logan Company that I asked you for?

A. Yes, sir.

Q. Will you let me have it?

A. Yes, sir. (Hands paper to Mr. Bolton.) It is from 1902 to 1911.

The Court: During what period?

A. 1902 to 1911, inclusive.

Q. Now, Mr. Drolet, I have here what is marked Exhibit S, a statement showing the net earnings, and dividends paid from 1902, inclusive. You have a copy of it there?

A. Yes, sir.

Q. Who prepared that?

A. I did.

Q. Did you prepare it personally?

A. Yes, sir; personally.

Q. Did you approve it after you went over it?

A. Yes, sir; I did.

Q. And do you say that that chart that you prepared, together with the other charts that you prepared, are accurate in every respect?

A. Yes, sir.

Q. On the right hand side, under the head of "total," you have figures totaling $4,930,348.49. What do you mean by that?

A. That is the aggregate amount of investment from 1902 to 1911. That is the amount of the total investment or the amount of money to compare with the earnings.

500 Q. Do you mean to say that the total investment of the Newark Natural Gas and Fuel Company from 1902 to 1911 aggregates $4,930,348.49?

A. That is the aggregate. In 1902, it was for seven months' operation. That would make a deduction of five months from 1902.

Q. Well, answer the question.

A. Yes, sir; I mean that that is the aggregate investment.

Q. That is the actual investment of the Newark Natural Gas and Fuel Company, is it?

A. The aggregate of each year.

Q. Well, is it the actual investment of the Newark Natural Gas and Fuel Company beginning in 1902 to 1911?

A. As shown by their books, it is the aggregate for each year.

Q. Well, you don't answer my question. The actual investment?

A. No, sir. The actual investment was $302,889.02. If you have $700,000 invested in 1902, and $721,000 in 1903, and $737,000 in 1904, and if you earn $50,000 in 1902 and $50,000 in 1903 and $50,000 in 1904, your per cent of earnings will be $150,000 upon

the aggregate of those three years' investment, will it not? That is the total, or aggregate, investment, to compare with the amount of net earnings from operations.

Q. What is the object of that?

A. It is merely a method in making comparative statements. If we earn $442,000 from 1902 to 1911, it will be that percent average for the number of years.

Q. Then the $4,930,348.49 does not represent an actual investment in money, by the company?

A. It represents the aggregate amount of investment for ten years.

501 Q. This is the total investment for 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910 and 1911, adding them all together?

A. Yes, sir. This is a consolidated statement.

Q. Well, adding them all together?

A. Yes, sir.

Q. You start off in 1902 with an investment of $183,187.96 in the City of Newark?

A. Yes, sir.

Q. Can you tell me what that investment is made up of?

A. I wish to say on that point that that investment in 1902 was an investment arrived at by the accounting department. We received inventories of the plants, and the figures were merely extended upon the books, to have a record of the investment.

Q. I want to know the different items of that investment?

A. Lands in fee, $800; rights of way, $60,000; buildings, $1181; large fittings, $2073.84; small fittings, $272.67; other material, $1694.19; labor, $17,553.03; gas receivers and regulators, $2,158.79; office furniture, $1,144.55; gas meters, $8,126.58; line pipe, $68,-967.68; main to curb connections, $19,215.63; making a total of $183,187.96.

Q. Well, they do not total that—the figures that you gave me. You omitted one very important item——

A. Yes, sir; that totals $183,187.96. If you will give me the item I have omitted here——

Q. Well, read your items again.

A. Lands in fee, $800; rights of way, $60,000; buildings, $1181; large fittings, $2073.84; small fittings, $272.67; other material, $1694.19; labor, $17,553.03; gas receivers and regulators, $2,158.79;

502 office furniture, $1,144.55; gas meters, $8,126.58; line pipe, $68,976.68; main to curb connections, $19,215.63; making a total of $183,187.96.

Q. Now, under the head of rights of way, what do you mean by that?

A. That is an account that we have. It is a franchise account. It is supposed to cover intangible values. We merely put it down. That is all; we had so many thousand consumers, and an investment of so much, and knowing about how much it ought to be per consumer, we noticed that there was a certain amount missing from the investment. We could not ascertain just where it was. It is a mat-

ter that has been ascertained by the accounting department; we are not authorities on that.

Q. As a matter of fact, it is simply a value that is put upon the franchise?

A. Yes, sir. Covering all intangible value.

Q. You had an inventory taken in 1902, in June?

A. Yes, sir; I think so.

Q. And that right of way was placed at $3,500.00?

A. Yes, sir.

Q. And was increased in December of the same year to $60,000?

A. Yes, sir. Because we did not believe $3,500 covered it.

Q. Well, it did not cost anything?

A. It is a question. I don't know. We knew that the plant was worth more than $123,000.

Q. Your schedule shows the actual earnings and actual expenses of your company?

A. Yes, sir. This was merely an inventory. I haven't that list of pipe and meters; that is all that I received in the Pitts-
503 burgh office—this list of material. In view of the fact that there was no absolute physical appraisement taken of the plant, nothing else was left for us but to extend the figures at what we thought was right.

Q. And you voluntarily increased the investment of the company from $122,638.00, $60,000.00?

A. Yes, sir.

Q. In six months' time?

A. That is a feature which we had omitted in the opening——

Q. That was an inventory?

A. Yes, sir; of the physical property.

Q. In June, 1902?

A. Of the physical property; yes, sir.

Q. The physical property in June, 1902, was $122,000.

A. That is what we thought it was. We put $60,000 as being intangible.

Q. And the $60,000 which you added was the franchise value?

A. Yes, sir. What we estimated was the franchise value.

Q. And you have nothing on your books to show that you paid anything at all for the franchise?

A. Nothing at all; no, sir.

Q. Now, on the same chart: Do you say now that you have given all of the earnings of the Newark Natural Gas and Fuel Company?

A. Yes, sir. Of the Newark Natural Gas and Fuel Company.

Q. All of the earnings?

A. Yes, sir.

Q. Now, as a matter of fact you had a shop account, didn't you?

A. That was not from gas operations. It varies like a warehouse adjustment account.

504 Q. You had a shop account during each year in your gas business?

A. Yes, sir.

Q. And from 1902 to 1911 you took in $3,477 in that way?

A. That is possible; yes, sir.

Q. Isn't it possible that you omitted, under the head of meters, a considerable portion of the money that was collected for rent of meters?

A. I think, in miscellaneous earnings, you will find that I have an item. In that item, I included all meter rentals; as shown upon our earning sheet—earnings from gas profits; not from plumbing business; shop account; warehouse account; they are not from gas operations.

Q. This is money that you took in in your business?

A. It is money that we took in in doing accommodation work in the shop, but we did not figure it as earnings.

Q. Well, it is a good deal of profit to make $3,477?

A. We have to figure on how much we lost on the warehouse adjustments.

Q. You don't make any allowance for the expenses that you put in there?

A. That is net earnings from gas; net earnings from gas operations. It is not anything that I am trying to deceive you about. That is the way we estimate it.

Q. What I am trying to get at is that, while you have charged up the total expense of the operations of the Newark Natural Gas and Fuel Company plant at Newark, you have not given the total earnings?

A. The expenses in the shop are charged directly to the shop account. It is an earning of its own. In the shop account business, if we do some work—if a consumer wants us to do some
505 work, we do it, and we credit the warehouse account, and we charge "shop," and we credit shop so much. In the shop account there exists an apparent profit which we make on the material and also on the amount of labor; and when the payrolls are made out at the end of the month, the amount of the work that went into that shop account is charged to the shop account. It was absolutely independent from the operation or the selling of a foot of gas.

Q. I understand that, but at the same time it is a receipt?

A. All right, it is a receipt.

Q. In you- expenses of the Gas Company, there should be charged the total operation expense?

A. These expenses do not include any shop expense. We have warehouse expense, but that is a different thing entirely.

Q. You have charged for operating the lines?

A. Yes, sir. That has nothing to do with the shop.

Q. And repairs of meters?

A. The operation of the shop has nothing to do with that.

Q. Well, you have those accounts?

A. Yes, sir; we have, certainly.

Q. For operating lines, you have $4,749.53, in 1911?

A. Yes, sir.

Q. And repairs of meters?

A. Yes, sir.

Q. Isn't that a shop account?
A. No, sir.
Q. That is done on the outside, is it?
A. Most of it is. A good deal of it is. They send meters to the different stations to have them repaired and tested. I do not think they have a testing plant here.
Q. And you have a charge for repairing lines?
A. Yes, sir.
506 Q. What is a shop account?
A. Shop account is a clearing account for all little odd jobs which we do for consumers. Half of the time, it is on the other side.
Q. Do you charge the shop account for all material used?
A. No, sir. We charge that to the warehouse account.
Q. You have $69.59, warehouse account?
A. Yes, sir. There is freight, and so forth. What I gave you for construction, is not the same thing. It could be named miscellaneous P. and L. earnings. It is merely to keep a record of how much we lose in trying to fit up plants for the consumers.
Q. Well, the Company actually gets the money?
A. If you say they get it, I will take your word for it.
Q. Do you know whether they do or not?
A. It isn't from gas operation.
Q. What would you say it is from?
A. I would say that it is profit derived from doing odd jobs for the consumers of Newark.
Q. They don't do any plumbing jobs for the waterworks?
A. No, sir.
Q. You don't hire out to do other people's plumbing, do you?
A. Suppose a man buys a burner and wants it set, what do we do?
Q. Well, you don't do work on the outside for other people?
A. No, sir.
Q. It is connected with your plant?
A. Yes, sir; it is connected with the plant. It is incidental.
Q. In 1902, what were the meter rentals that you received?
A. We had no meter rentals in 1902.
507 Q. Are you sure of that?
A. Yes, sir.
Q. Well, in 1903?
A. We had no meter rentals then.
Q. Are you sure of that?
A. We had meter surrenders—$233.35.
Q. Now, in 1904?
A. Meter surrenders, $761.75.
Q. Did you have any meter rentals?
A. No, sir; none in that year.
Q. Are you sure of that?
A. Yes, sir; I am sure of that.
Q. Now, in 1907?
A. In 1907, we had a meter rental account of $3,532.70; meter

surrenders, $181.15; and we had miscellaneous earnings of $8,250.

Q. That is, back collections of gas?

A. Yes, sir.

Q. Collections of back gas?

A. Yes, sir. That is right.

Q. Now, in 1908, what were your meter rentals?

A. $3,621.65. Meter surrenders, $54.

Q. Now, in 1909?

A. Meter surrenders, $548.35, and $475.55; a change from one account to another on account of a change of plans. Number two plan was a plan to purchase the meters, and when the account closed up there was $475.55, which was merely transferred to the meter surrender account.

Q. What were the other figures?

A. $548.35.

Q. The $72.80 is what?

A. That is a difference between the two accounts. If you take $475.55 on one account——

Q. (Interrupting.) How did you figure the loss?

A. I would have to analyze the account to figure out the loss; but it is merely a meter rental account.

508 Q. How do you figure the loss?

A. I could not tell you off hand. I would have to analyze that account for you.

Q. Well, they ought to be added, oughtn't they?

A. There might have been a balance which went into meter surrenders number two, which were merely meter surrenders.

Q. Doesn't it appear on your books as an addition, rather than a subtraction?

A. I beg your pardon.

Q. Well, what do you want to say about that as to whether it is a fact that this appears as an addition or a subtraction on your books—these two items—whether they are added instead of being subtracted?

A. As debits, or credits?

Q. They both appear as credits, don't they?

A. No, sir; they don't both appear as credits.

Q. They don't?

A. No, sir.

Q. You want to be understood to that effect, do you?

A. Yes, sir.

Q. You have an item of revenue known as "turn-on and turn-off," haven't you?

A. No, sir; we haven't.

Q. You don't know about that?

A. We never had such a thing; no, sir.

Q. You don't know that there is such a revenue?

A. If there is, it is certainly not returned to the accounting end, as "on and off," at least, it hasn't that term.

Q. Taking the net earnings of the Company from 1902 to 1911, you say that the net earnings total $442,569.63?

A. Yes, sir.
Q. Are you sure of that?
A. Yes, sir; I am.
509 Q. Now, take your figures and add them up again and see if you are not mistaken about that? (The witness figures.)
A. Well, sir, there is a mistake in there. It should total $472,569. That is my mistake. I made it myself.
By Edward Kibler: How much?
A. $472,569.
Q. $30,000 of a mistake?
A. Yes, sir.
Q. In 1911, you have the interest earnings of the Company. Notwithstanding the fact that you have $29,000 in 1910, interest, you did not pay any dividend until 1911. You account for no interest. Can you explain that?
A. The Union Natural Gas Corporation handled the money of the Newark Natural Gas and Fuel Company. In handling that money, it paid 6% upon the balance. In 1911, when they decided to pay that amount of money, they merely refused to pay interest from January 1st on, until they declared that dividend.
Q. Although they paid $29,269 in 1910, on the same amount of money?
A. Yes, sir.
Q. And as a matter of fact, they had that money all that time up until the dividend was declared?
A. Yes, sir.
Q. This interest that you received on this money was money of the Newark Natural Gas and Fuel Company which was out on loan, wasn't it?
A. Yes, sir.
Q. And you had an account known as the Union Loan Account?
A. Yes, sir.
510 Q. In which this money was placed?
A. Yes, sir.
Q. And that covered a greater part of your contingent property?
A. It covered the surplus of the Newark Natural Gas and Fuel Company from 1902 on, and also the account of properties that the Newark Company sold to the Logan Company. The Newark Company sold its property to the Logan Company, and the Logan Company borrowed the money from the Union Company, and assumed the debt, and the Union Company held the account.
Q. What was your actual cash balance December 31, 1911? What was your actual cash balance then?
A. The Newark Natural Gas and Fuel Company?
Q. Yes, sir. On December 31, 1911?
A. $924.37.
Q. How much money did you have out on the Union loan account?

A. The Newark Company owed the Union loan $74,212.21.
Q. It owed it?
A. Yes, sir.
Q. How much did they owe the Newark Company?
A. I would have to get the Union books and give an analysis of the account in order to give you that information.
Q. Don't you admit that you had $166,000 as a surplus after paying dividends in 1911?
A. I would have to analyze them separately.
Q. Don't you account for a surplus of over $160,000, after paying the dividend in 1911?
A. Yes, the statement shows $166,000, including the Newark Coke Company account.
Q. Including the Newark Coke Company?
A. Yes, sir.
511 Q. You don't account for them at all, do you?
A. That is not the Newark Natural Gas and Fuel Company.
Q. You don't account for the Newark Coke Company in that surplus, do you?
A. No, sir; we don't.
Q. The investment of the Newark Natural Gas and Fuel Company was, in 1902, $183,187.96, in the City of Newark; and, in the succeeding year, it was $214,547.65, wasn't it?
A. Yes, sir.
Q. And you made betterments during that year of $31,359.69?
A. Yes, sir.
Q. That is the betterment that you account for on the last line of this chart?
A. You mean, in the total?
Q. Yes, sir.
A. Yes, sir.
Q. And in 1904, you made betterments of $13,124.79, didn't you?
A. Yes, sir.
Q. And that is accounted for in the change of investment from $214,000 to $27,000?
A. Yes, sir.
Q. And the succeeding year, there was $14,747.11 added to the investment account?
A. Yes, sir.
Q. Which is shown on your chart to be a betterment?
A. Yes, sir.
Q. In 1906, there was $10,849.03 added to your investment account, which is also shown on this chart to be a betterment?
A. Yes, sir; that is right.
Q. In 1907, there is a charge of $1,554.96, which shows that there had been taken from the investment that amount?
A. Yes, sir.
Q. That is from the sale of some property of the Newark Company?

A. Yes, sir. Either through a sale of the property, or a reduction in some way.

512 Q. And in the succeeding year, 1908, there was $3,805.72 added to the investment, which is shown as a betterment on this chart; and the next year, the amount shown by the chart—$3,937.59—was added as a betterment?

A. Yes, sir.

Q. And in 1910, $3,825.77 was added to the investment, which is shown as a betterment on this chart?

A. Yes, sir.

Q. And in 1911, $2,350.64, which is a charge added to the inventment, as shown on this chart?

A. Yes, sir.

Q. As a matter of fact, all those betterment charges were added to the investment?

A. Yes, sir. Added to the town investment.

Q. From year to year?

A. Yes, sir.

Q. And in 1911, this Company included the franchise of $60,000 which you arbitrarily put into this plant, which shows an investment of $304,889.02?

A. Yes, sir; in 1911.

Q. You have a charge, in connection with your expenses, known as a charge for operating the lines?

A. Yes, sir.

Q. In 1911, it was $4,749.53?

A. Yes, sir.

Q. What is that?

A. It is $4,749.53. That would cover labor and payrolls and so forth.

Q. For what?

A. For reading the meters and making repairs on the lines and operating the lines in general in the City.

Q. You have a charge of $1,265 for repairs of lines?

A. Yes, sir. The labor in the actual operation of the lines.

513 Q. What is the repair of the lines?

A. That is the repair of the lines.

Q. What are the different items composing the repair of the lines?

A. The labor. It is mostly made up of labor. I have not the vouchers here, but that is what it is mostly made up of—labor.

Q. Of material, too?

A. There is very little material; unless it is an absolute renewal. The instructions state that unless it is an absolute renewal, then only should it be charged to the investment.

Q. What is the operating of lines?

A. That is mostly labor.

Q. What are the different items that compose that?

A. It is mostly made up of pay rolls.

Q. For what?

A. For the operation of the lines.

Q. In what way?

A. We have regulating stations which we have to have men fix and watch. The men in connection with the operation of the lines can tell you better than I can.

Q. How many men have you in connection with the operation of the lines?

A. I cannot tell you how many.

Q. Have you more than five?

A. Yes, sir. There must be.

Q. Outside of the office force, have you five?

A. I would think so; yes, sir.

Q. Outside of the meter readers, who work once a month, have you five?

A. Well, I couldn't tell you that. I am not familiar with the plant. The only thing I know is the distribution.

514 Q. Isn't it a fact that you have only three outside of the meter readers and the office force?

A. I couldn't tell you as a matter of fact, because I don't know. I don't know anything about the local conditions of the plant.

Q. Under the head of expenses, you have the salaries of officers?

A. Yes, sir. Salaries and expenses. We have them in the general expense. In the general expense, we put the salaries of the officers and superintendents.

Q. The office expenses are taken out of the office fund, aren't they?

A. That is the office expenses here; yes, sir.

Q. In 1911, $6,405?

A. Yes, sir. That is all office expenses; not only salaries, but all expenses incident to operating the office.

Q. You paid out for repairs of lines, in 1911, $1265.65, and for repairs of meters, $2342.80?

A. Yes, sir.

Q. Most of that is for labor?

A. I think most of it is. I would have to make an anaylsis of those particular distributions to tell exactly. But I know it is made up mostly of labor.

Q. This expense that you have charged to the city plant here in 1902, $12,992—they run from that up to $27,281.50 Those are the Newark City expenses, and the general expenses—the expenses, are they?

A. They include the expenses in the field in 1902.

Q. There was an investment of $700,000 in 1902. In 1911, the operating expenses were $27,281.50?

A. Yes, sir.

Q. That includes all the labor, material and clerk hire and office rent, and all expenses incidental to the management of the

515 plant at Newark in 1911, does it?

A. Yes, sir. And $71.87 is included in that on the Thurston line, making a total of $27,281.50.

Q. That is all the money that was spent in Newark in 1911?

A. Yes, sir; that is all the money.

Q. And $27,281.50 also includes the amount which you have charged for betterments?

A. No, sir.

Q. You said that the $27,281.50 represented all the money that you spent in Newark in 1911?

A. For operating expenses. I misunderstood your question. $2350.64 was spent for betterments to the plant.

Q. In addition to that?

A. Yes, sir.

Q. Isn't it a fact that that $2350 is included in that amount?

A. No, sir; it is not a fact.

Q. And that the items in the $2350 are items that come in under the head of expenses, in 1911?

A. No, sir. I will give the features included in that.

Q. Well, just wait until I come to that. In 1911, when they would do a piece of work, they would send to the Pittsburgh office an item of the work done, and where it was done, and what the work consisted of?

A. I don't know whether it went to the Pittsburgh office. We got a statement of the material and where it went to. A transfer of the material. There was a transfer made out from the local office stating that so much was taken from the warehouse, and the warehouse was credited. And it went to Pittsburgh, and it was charged there as betterments of the plant on their books.

Q. That is your explanation of it?

516 A. Yes, sir.

Q. Do you know that that is true?

A. I have not gone into the distribution of it, or the vouchers, but I am sure that that is a fact.

Q. In answer to Mr. Fitzgibbon the other day, you deducted $82,445.35 from the total receipts of the company, to show that the receipts of the company were $360,000, didn't you?

A. That is, the receipts from gas operation.

Q. As a matter of fact, the earnings of the Company were $472,569; and instead of declaring a dividend on the $82,000, you just simply spent it on the plant, didn't you, and charged it to the investment? Instead of taking the money that you actually earned for gas in those ten years—from 1902 to 1911—instead of declaring dividends on that—on the $82,000—you just simply added it to the plant, didn't you, and it was charged to the investment?

A. It was charged to the investment yes, sir.

Q. The actual earnings of the company were $472,569.69?

A. Yes, sir.

Q. That is true, isn't it?

A. Yes, sir; that is true.

Q. How much did your company charge for gas in Newark in 1911, wholesale?

A. Do you mean the Newark Natural Gas and Fuel Company?

Q. Yes, sir.

A. I believe, for five months, they charged 18 cents, for domestic gas.

Q. Well, I said wholesale.
A. Well, I couldn't tell you what it charged wholesale for gas. I would have to get the analysis of the earnings.
Q. You don't know what the wholesale rate was in Newark?
A. No, sir. I believe the average wholesale rate was about 11.6 cents in 1911.
517 Q. Now, Mr. Drolet, you have another item in 1911, receipts, $1,001.71.
A. How?
Q. Isn't there another item of receipts of $1,001.71, in 1911, in addition to those which you have stated?
A. That is warehouse, or P. and L. expense account. I don't know what that is made up of. It is $1,001.71.
Q. It is marked as a receipt by your company?
A. It is possible that it is a receipt.
Q. It is marked as one of the receipts of the company, isn't it?
A. It is closed out in the end as a profit and loss entry.
Q. It shows on your books as a receipt of your company in 1911, doesn't it?
A. Yes, sir; it does.
Q. Now, in 1907, Mr. Drolet, you have the receipts from the shop account, $3,144.66?
A. Yes, sir.
Q. And that is not shown on your chart?
A. No, sir; that is not.
Q. And in 1908, you have a receipt of $345.84 from shop account?
A. $345.84, yes, sir.
Q. And that is not shown on your chart?
A. No, sir. And I don't show the bad accounts, either.
Q. And you have $171.62 on the shop account in 1910?
A. How much is it?
Q. $171.62.
A. Yes, sir. And $145.37 on the other side, of bad accounts. There is lots of it on the other side.
Q. Well, Mr. Fitzgibbon will ask you about those?
A. Well, I just wanted to tell you the fact.
Q. Now, you have, in 1911, $71.24, shop account.
A. $71.24; yes sir.
Q. What are the shop receipts in 1906?
A. $625.73.
Q. How much in 1905?
A. $490.12.
518 Q. How much in 1904?
A. $411.03. And bad accounts, $2,003.39. Get that.
Q. Well, I didn't ask you for the bad accounts?
A. There are a lot of payments that I could have put in to off-set those items. Bad gas accounts.
Q. Well, you are anxious to give that?
A. Well, you are anxious to get the others.
Q. In 1904, receipts, $1,115.03; warehouse adjustments?
A. Yes, sir; warehouse adjustments, $1,115.03.

Q. In 1907, you had receipts of $204.28?
A. $204.28; yes, sir.
Q. In 1908, how much did you have?
A. The warehouse adjustment is not a cash receipt. You call it a receipt. It is not a receipt.
Q. Doesn't it appear that way on your books?
A. No, sir; it is a profit that is shown in the taking of the different inventory periods.
Q. It is shown as a profit on your books, isn't it?
A. Yes, sir; but not a receipt.
Q. I want to know what the item is and how much it is as shown by the book.

By J. R. Fitzgibbon: Well, he is entitled to answer the question.
The Court: He is entitled to give a full answer.

By Mr. Bolton: Go ahead and answer in 1910.
A. What do you want to know?
Q. The warehouse adjustment?
A. $551.73.

519 Q. In answer to a question by Mr. Fitzgibbon, you said that, in order to pay those dividends, you had to draw on your contingent account. In order to pay the dividends of $204,000, $180,000 and $600,000, you had to draw on your contingent account, didn't you?
A. We paid them out of the surplus.
Q. And not out of the earnings?
A. Out of the surplus and earnings. All earnings were put into the surplus first before they were declared as dividends.
Q. Wasn't the dividend in 1904 paid out of the earnings of the company?
A. It was paid out of the surplus of the company.
Q. It was paid out of the surplus?
A. Yes, sir.
Q. Did you say out of the surplus?
A. Out of the surplus; yes, sir.
Q. Now, the dividends in 1908 and 1909—they were paid out of the surplus, too, were they?
A. Yes, sir; all the dividends were declared out of the surplus.
Q. Isn't it a fact that the receipts of the company in 1902, 1903 and 1904 were sufficient to pay the dividends? The earnings, from the gas operations. The dividend of $180,000?
A. Yes, sir, they were—well, there was a $5,000 deficit.
Q. Isn't it a fact in 1909, when the dividends were paid, that the earnings of the company were sufficient to pay that dividend—the earnings from gas?
A. Yes, sir; they were sufficient.
Q. The first time that you drew on the surplus of the company was when you paid the dividend of $600,000?
A. Yes, sir.

520 Q. And it left $166,000 of a surplus at that time, after paying the dividend—after paying the $600,000 of dividends?

A. Yes, sir. The property contingent account was carried separately to distinguish what the earnings would be from June 1902 to the present time; the old surplus accounts were carried as property contingent accounts, instead of surplus account. That was closed out and placed to the surplus in 1911, when they declared that $600,000 dividend. In paying the $180,000 in 1904, and also the $204,000—to make it possible to pay those dividends, it had to include the interest on the loan account.

Q. The interest was a direct credit to the Newark Natural Gas and Fuel Company?

A. Yes, sir, but it didn't come from selling gas——

Q. (Interrupting.) It never entered into the calculation of the contingent account. It went in as a yearly revenue.

A. Yes, sir. But as interest on loan—that is what it went in at.

Q. In paying the dividend of $600,000 in 1911, you paid it out of the contingent fund of the company, together with the gas earnings for 1910 and 1911, did you not?

A. Yes, sir. When they declared the dividend of $600,000, we transferred the property contingent account into the surplus account, and declared the dividend from the total.

Q. And, in taking into account the net earnings of the company for 1909 and 1910, you took into account the interest that the company earned in those years, did you not?

A. Yes, sir. The property sold, and also the operations.

Q. You took into account all the receipts of the company?

A. Yes, sir.

521 Q. In declaring the dividends?

A. Yes, sir.

Q. In 1910 and 1911?

A. Yes, sir.

Q. And did not eliminate the warehouse account or interest on loans?

A. No, sir.

Q. Or any miscellaneous items?

A. No, sir. We eliminated the bad gas accounts and the warehouse adjustments.

Q. To make up your net results for the year, you took into consideration all the items earned by the company?

A. Yes, sir.

Q. And all the expenses of the company including bad debts and everything else?

A. Everything else, yes, sir.

Q. What did you say that a fair depreciation was in a gas company?

A. A fair charge for depreciation, do you mean?

Q. Yes, sir.

A. Do you mean in a local property?

Q. In a natural gas business.

A. My views are governed by the experience that I had from attending a conference as to the income tax, and they told us to charge 8% on the field property. They said: "We will allow you

up to 8%. From the concensus of opinion of the gas people, it should be more.

Q. What about the depreciation in a distributing company such as the Newark Natural Gas and Fuel Company?

A. The Ohio Commission allows them 5% on natural gas. And my experience has only been as to the figures in different companies, as to what they would allow.

Q. Do you think that 5% is enough?

A. Yes, sir, I think it is.

522 Q. And it is not too much?

A. Well, that all depends upon the condition of the plant. I am no authority on that.

Q. You say an operating company ought to be entitled to greater than that?

A. You mean a producing company?

Q. Yes, sir.

A. Yes, sir. Take a plant like this—a local distributing plant—if the natural gas should play out in five or ten years, there would still be some advantages in putting the plant to some use, although it would cost you more than an artificial plant; and it would take a lot of money to put it in a condition to use artificial gas. In that way, it eliminates one of the elements of depreciation—obsolescence. A gentleman said that the depreciation of the main line would be—that would be a junk price; but he didn't take into consideration that in order to put that on the market as junk, that it would take 25% to put that material into shape to make it junk, in order to get junk prices. If your natural gas plays out, you have nothing but a lot of lines and wells, and pipe material, that is practically junk, and it would take a lot of money to put it in shape so that you can get junk prices out of it.

Q. What is your idea of the percentage in a distributing company?

A. Five per cent.

Q. Well, for a producing company.

A. I don't think less than seven per cent. Eight per cent if you have to put renewals back in.

Q. You fixed it as six per cent the other day, didn't you?

A. It was an arbitrary price.

523 Q. You are taking it from the experience of other people, and not from your experience.

A. My own experience has been principally in the accounting department. I have been with practical gas men who have discussed the subject as to the amount. I think that is governed a whole lot upon what a company is compelled to put back in every year. Take a gas plant which makes a million dollars a year, and if it must put $500,000 into the property every year, and it keeps doing that without increasing its revenue in any respect, from year to year, then I think the percentage of depreciation on a plant like that should be sufficient to cover every feature of the investment, and also to cover a proper depreciation of the original investment that they put in.

Q. It is your idea that a natural gas corpoartion, starting in the distributing business today, that, in a year from today, it would de depreciated five per cent?

A. It would depend on how much you would put back to keep the property in condition. The depreciation does not amount to anything unless you can create a sinking fund to represent the depreciation. You might charge ten per cent for depreciation, and you might have a fund which would be represented by nothing; a depreciation fund which has not a fund sufficient to represent it, does not in any way protect your original investment.

Q. Do I understand that a corporation starting in to distribute gas today, in a year from now you would create a sinking fund, or a depreciation account, of five per cent at the end of that time? Is that your idea?

A. Yes, sir.

Q. And in another year, you would do the same
524 thing?

A. Yes, sir. Any renewals that you would have to put in, would be charged to the depreciation account.

Q. And you would do that through the life of the plant?

A. Yes, sir.

Q. What do you mean by depreciation?

A. I mean when a capitalist invests a certain amount of money, that amount is supposed to pay for a fair return, and at the end of a certain time, when the investment will be gone, so there will be enough money there to return the amount that they originally invested. That is the only safe way in which you can induce capital to invest.

Q. Isn't it a fact, Mr. Drolet, that the depreciation is for the deterioration of the tangible property?

A. Yes, sir. An expert could tell you the elements—electrolysis is one feature and different soils is another feature. People who come in contact with the defects every year—they can tell you better than I can.

Q. Isn't it the replacement of the deterioration?

A. Yes, sir. And the amount of money that it will take to convert it into something else.

Q. Assuming that a natural gas corporation starts into business today in Newark, distributing natural gas with an investment of $100,000. Now, upon your theory, at the end of one year, the actual physical deterioration of that plant would be $5,000.

A. If you figure that the actual physical property of the plant is all that is connected with the value of the plant, I suppose you could figure the physical elements of it more nicely on that basis.

Q. Well, isn't that what it is?

A. No; absolutely not. When you go to build a plant for
525 $100,000, and lay $100,000 down to cover the price of your material, where is your labor, and where is your organization cost, and the features which are necessary in the construction of the plant? They are elements which depreciate the same as your physi-

cal property depreciates. You cannot start and buy $100,000 worth of pipe and say that you have a plant.

Q. Your company never made an allowance for depreciation?

A. As a matter of fact, we do not believe in depreciation, unless we had actually put away a sinking fund; and if we had put away a sinking fund,——

Q. (Interrupting.) The Newark plant has depreciated, hasn't it?

A. I suppose the plant has, yes, sir.

Q. When was it first built?

A. I couldn't tell you that.

Q. And you never charged off anything for depreciation?

A. No, sir, on no basis whatever, except as a mere matter of accounting. We did it because the Federal Commission told us to do it.

Q. And $302,889.02 represents the actual investment of the company, including the item of $60,000 for the franchise?

A. Well, that is the book value.

Q. And nothing at all taken out for depreciation?

A. No, sir.

Q. And you think it amounts to about five per cent a year?

A. If you take the price of $300,000, the amount of the investment—I suppose you could figure it that way.

Q. If the company started in 1902, the actual depreciation of the property would be five per cent a year; and the additional investment would be added to it.

A. Yes, sir, less the renewals.

526 Q. And in 1903, on.

A. Yes, sir.

Q. Is that true?

A. Yes, sir. Of course, you can set a figure low enough.

Q. Taking your own figures——

A. (Interrupting.) Well, those are figures which we merely put down there.

Q. What do you mean by that?

A. I explained how we arrived at the valuation of the plant. An accounting department is no authority as to the price of pipe or the cost of labor. It is not an authority upon that.

Q. It is authority for the valuation that the company itself puts upon it, isn't it?

A. Yes, sir, it is.

Q. And in 1902, when you started in, you had a plant worth $183,187?

A. Yes, sir.

Q. Including $60,000?

A. Yes, sir, for the franchise.

Q. For the franchise?

A. Yes, sir.

Q. Representing $123,000 of actual property?

A. Yes, sir.

Q. And taking five per cent from that a year, from 1902 to 1911, and add your investment, or your betterments, you would arrive at

what you call, under your idea of depreciation, at the actual valuation of the property?

A. My idea is not far from the ideas expressed—well, I have told you what my experience was. I suppose some companies, from their small amount of betterments, have very little to charge to depreciation. They have to charge off of their depreciation account for their betterments.

The Court: We will have an intermission of about five minutes.

(Here the court took a recess.)

(After the expiration of the recess.)

527 Mr. DROLET.

Cross-examination (resumed).

Examined by Mr. Bolton:

Q. Mr. Drolet, what is the capital stock of the Newark Natural Gas and Fuel Company?

A. The capital stock, authorized, is $100,000.

Q. How much was paid in?

A. $81,600.

By Edward Kibler: That is the stock that has been issued?

A. Yes, sir, issued.

Q. That is the total amount of stock issued to date?

A. Yes, sir, that is the total amount issued to date.

By Edward Kibler: How much?

A. $81,000.

Q. As far as you know, that is the total amount of stock that was issued originally?

A. Yes, sir.

Q. Now, Mr. Drolet, I will ask you if the meter surrenders and meter rentals by the Newark Natural Gas and Fuel Company, as receipts from 1902 to 1911, inclusive, were not $4,319.35 instead of $20,645.85, as you have indicated in your testimony?

A. The meter rentals and meter surrenders?

Q. Yes, sir.

A. No, sir.

Q. Have you the field investment there, Mr. Drolet, of the Logan Natural Gas and Fuel Company for 1905?

A. The Logan Natural Gas and Fuel Company?

Q. Yes, sir.

A. 1905?

Q. Yes, sir, in 1905.

A. It was $3,933,729.93.

528 By Mr. Fitzgibbon: That is for 1902?

A. No, sir, 1905. That is the field investment of the Logan Company in 1905.

By Mr. Fitzgibbon: I wish you would read that amount again.

A. $3,933,729.93.

Q. Will you state the field investment of the Logan Company for each year after that.

A. The field investment for each year after that?

Q. Yes, sir.

A. In 1906, it was $4,380,167.55, December, 1906. That is the field investment.

Q. Now, in 1907?

A. In 1907 it was $4,807,044.40.

Q. Now, in 1908?

A. In 1908, it was $5,029,257.65.

Q. Now, in 1909?

A. In 1909, it was $5,296,623.26.

Q. Now, in 1910?

A. In 1910, is was $5,554,708.87. Do you want them in 1911?

Q. Have you given them in 1911?

By Edward Kibler: No, sir, he has not given them in 1911, yet.

A. In 1911, they were $5,861,562.86.

Q. Your total production of gas in 1905 was 7,359,015,000.

A. Yes, sir.

By Edward Kibler:

Q. What year is that?

A. 1905.

Q. In this chart marked I, you have compiled a table showing the cost of production, including the field cost and the depreciation charges, and the profit upon a certain basis, haven't you?

A. Yes, sir.

Q. Now, taking the depreciation charges in 1905. That
529 depreciation of 1905 represented 2.72 of a cent, did it not——

A. Yes, sir.

Q. On each thousand cubic feet of gas sold?

A. That is the depreciation—2.72.

Q. What does that amount make on the total production of gas in dollars and cents?

A. On the total production?

Q. Yes, sir.

(The witness figures.)

A. $200,164. And some odd cents. I didn't take the 15,000 feet into consideration.

Q. Now, isn't that six per cent of the investment of the Logan Company?

A. Of the field, yes, sir.

Q. Now, capitalize that.

A. At six per cent?

Q. Yes, sir.

(The witness figures.)

A. $3,336,080.

Q. Now, compare that with the field investment.

A. For what year?
Q. 1905.
A. I figure the depreciation upon the investment——

By Edward Kibler: Let him answer the question.

The Witness: I cannot answer the question. I have just given you the investment as of December, 1905. I have applied the figures of depreciation on the investment, 1904; and not upon the new property we put in in 1905.

Q. In 1905—that represents your total gas output in that year?
A. Yes, sir, that number of feet.
Q. It represents your actual operations for that year?
A. Yes, sir.
530 Q. Your figures for depreciation of the property of the company was 2.72 of a cent for the year 1905?
A. Yes, sir.
Q. In your chart?
A. Yes, sir.
Q. And yet, capitalized upon the basis of you- total output of gas in 1905, you find that there is a great deal of discrepancy, don't you?
A. No, sir. You don't depreciate the new investment that you put in in 1905; that depreciation does not enter into the figures at all.
Q. How much is the discrepancy?

By J. R. Fitzgibbon: There isn't any discrepancy.

By Mr. Bolton: I am asking him. Now, take 1903, Mr. Drolet. You have given a depreciation of one cent and 83/100 of a cent, haven't you? You give the figures of depreciation at one and 83/100 of a cent.

By J. R. Fitzgibbon: When?
By Mr. Bolton: In 1903?

A. Yes, sir.
Q. You don't figure the depreciation in 1903 at all?
A. On the investment of December, 1902.
Q. You have your chart marked "1903," haven't you?
A. You cannot figure a depreciation on the investment at the end of the year in which you make that depreciation charge. Your investment that you have put in during the year in not subject to depreciation.
Q. You figure the depreciation on the total investment,
531 don't you?
A. It is a matter of opinion and accounting, is all; it is not proper——
Q. At the end of the year, isn't the proper thing to do to make the charge for depreciation and take your betterments and add the betterments to it?
A. We carry our betterments each month right along until we come to the end of the year, and we have the total investment distri-

buted through the whole period; and when we want to arrive at the amount of depreciation that actually occurred in 1905, we take the figures as they stood in December, 1904; and use that amount of investment as the amount upon which the depreciation shall be figured, and not upon 1905.

Q. What depreciation did you figure in 1904 for the field?

A. There are some figures on the back of that chart. There are some ink figures on the back of it.

Q. In 1906, you figured that there was a depreciation of 3 and 7/100 of a cent?

A. Yes, sir.

Q. You say that you figured that on the basis of 1905?

A. The investment used to be applied to the investment in December, 1905.

Q. On the total amount of gas?

A. Yes, sir, on the total amount of gas produced.

Q. In 1905, it was 7,359,015,000. Now, taking the figures in 1905—7,359,015,000—have you got that?

A. I don't know what you want.

Q. I want you to multiply that by the figures of depreciation, 2 and 72/100 of a cent.

(The witness figures.)

A. $200,164.

532 Q. In 1906, you would be calculating the depreciation on the total amount of gas in 1906, wouldn't you?

A. Let me explain that. In 1906, we produced 7,690,000,000 cubic feet of gas. December 31, 1905, our field investment stood: $3,933,729.92. At 6% depreciation upon that—the witness figures) it makes a depreciation charge for 1906 of $236,023. If we produce 7,690,000,000 cubic feet in that year, the cost of depreciation would be 3 and 7/100 of a cent.

Q. As a matter of fact, when you made this chart, you figured the depreciation in the field cost for the year 1903, and the depreciation and profit for 1903, didn't you?

A. How is that?

Q. When you made this chart, in figuring out the total cost of production per thousand cubic feet, you figured out the field cost in 1903?

A. Yes, sir.

Q. The depreciation charge in 1903?

A. Yes, sir.

Q. And the profits in 1903?

A. Yes, sir, the profits.

Q. These figures do not really represent what you intended them to represent, do they?

A. Yes, sir, just exactly.

Q. Just exactly?

A. Yes, sir.

Q. What is the field investment of the Logan Company each year? From 1902 on?

A. I had the investment on those sheets. I had the amount produced. The investment and the expenses on the back of one of those sheets there.

Q. Well, commencing in 1905.

A. I can give you from 1906—from January, 1906 on.

Q. Well, go ahead.

A. I was certain that they were on the back of those statements that you have there.

533 Q. Is this what you mean? (Indicating paper.)

A. No, sir, it was a heavy sheet. I put it on the back.

Q. State the additional field investment from 1903 to 1911, inclusive—the additional investment of the Logan Natural Gas and Fuel Company.

A. In 1903, we put into the field investment $263,313.95; in 1904, $318,425.87; in 1905, $596,835.92; in 1906, $446,437.82; in 1907, $426,876.85; in 1908, $222,213.25; in 1909, $267,365.61; in 1910, $258,085.61; in 1911, $306,854.01.

Q. Now, Mr. Drolet, I will ask you if, during the operations of the Logan Natural Gas and Fuel Company from 1902 to 1911, whether the depreciation was deducted?

A. No book entries were made for depreciation except for 1910 and 1911.

Q. These figures that you have given as the actual investment of the Logan Company for 1905 and 1906 and 1907—do they represent the actual field investment of the company as the books themselves show it?

A. Yes, sir. As the books themselves show it.

Q. And no depreciation charge has been entered against them?

A. No, sir. Our depreciation charge in 1909 and 1910 has been merely a book entry; there is no fixed amount to represent it.

Q. I will ask you again to state, Mr. Drolet, what the difference between your figures of $3,933,729.93, and the figures shown by the actual gas operations of the company, on a basis of 2 and 72/100 of a cent, capitalized at 6%—what that difference is?

A. Do you mean what will be the amount capitalized at 6% figured upon the production of 1905?

534 Q. Yes, sir. Based upon the amount of production in 1905.

A. It amounts to $200,164, at 6% it would be $3,336,080.

By Edward Kibler:

Q. Will you state that again?

A. $3,336,080.

Q. Take the difference between the capitalization and the amount that you gave us in 1905——

A. (Interrupting.) There is about $800 difference. I didn't carry the fractions out.

Q. What is the amount of field investment in 1905?

A. $3,336,893.81. I used just the million feet.

Q. What is the difference between your capitalization under that theory, and the investment in 1905?

A. The investment in December, 1904, was $7,336,000——

Q. Well, I am talking about 1905.

A. It makes a difference of $596,835.92—the amount of money we put in during the year 1905.

Q. In the year 1905, your field cost, for 1905—did you take the figures of 1904, or 1905?

A. The figures of 1905, for the field cost. The expenses of the current year.

Q. And in making up your profits, did you take the investment of 1904, or 1905?

A. It is not customary to figure profits on depreciation, at the end of the year.

Q. Well, what did you do?

A. I did not use the figures as at the end of the year, but I used the figures as of the end of the year previous.

Q. 1904?

A. Yes, sir. As to both the depreciation and the profits.

Q. The depreciation and the profits?

A. Yes, sir.

535 Q. Both of them?

A. Yes, sir.

Q. Did you ever make any chart of the Logan Company on a basis of the depreciation for each year from the time of its organization, or from 1902; on the basis of depreciation, as you put it, taking the depreciation from year to year?

A. The depreciation on rock pressure. No depreciation was attempted by the accounting department in dollars and cents.

Q. You didn't do that?

A. No, sir. Not as a matter of accounting.

Q. Has the investment on the books of the company ever been reduced by reason of the deterioration of the field investment?

A. No, sir.

Q. Notwithstanding the fact that there has been an actual deterioration of the plant at the rate of six or seven or eight per cent a year——

A. Yes, sir.

Q. You have not taken out any depreciation for the plant at all, but showed the net investment as accruing from year to year; and that is true of the Newark Natural Gas and Fuel Company too?

A. Yes, sir. That is true of both of them.

By Mr. Bolton: We would like to have an opportunity to investigate the statement that he made. We have not had an opportunity to examine it yet.

The Court: Have you any questions?

By J. R. Fitzgibbon: Yes, sir.

536 Mr. DROLET.

Examined by J. R. Fitzgibbon:

Q. Mr. Drolet, I think you stated to Mr. Bolton that the Newark Natural Gas and Fuel Company sold gas at wholesale. By that you mean what?

A. That we have factories in Newark which use gas under their boilers.

Q. That is what is known as industrial gas?

A. Industrial consumption, yes, sir.

Q. How is that gas sold by the Newark Natural Gas and Fuel Company—whether by contract or otherwise?

A. It is sold by contract, yes, sir.

Q. You said that the average price of gas sold in that way was 11 and 6/10 of a cent per thousand cubic feet?

A. In 1911, yes, sir.

Q. How much gas was sold by the Newark Natural Gas and Fuel Company in the year 1911 in that way?

A. I can give the approximate figures. In 1911, approximately, 600,000,000 feet.

Q. In what way?

A. Yes, sir. What we call special gas. Gas under the rate to people who used larger quantities than domestic.

Q. I will ask you what additional expense was incurred by the Newark Natural Gas and Fuel Company in handling this industrial gas, if any?

A. The expense would be very small. The number of consumers is very small. You possibly have $350 to $400 invested and it will possibly consume $20,000 worth a year; as much as five or six or seven hundred domestic consumers. And the cost of maintaining
537 that consumer is practically no more than to maintain a domestic consumer from the mere fact that they are on the job themselves. They are right there. We have to read the meters, but we have very little trouble.

Q. Would the extra expense amount to as much as five hundred dollars in the year for handling that gas?

A. I would think about five hundred dollars.

Q. I wish you would compute how much the Newark Natural Gas and Fuel Company under its contract with the Logan Company gets for this gas, in profit, sold at 11 and 6/10 cents?

A. That is, included in their share of the earnings?

Q. Yes, sir.

A. There are six hundred million cubic feet—they get an average of 11 and 6/10 cents. Of which the Newark Natural Gas and Fuel Company gets 30%. That would make a profit for the Newark Natural Gas and Fuel Company on each thousand feet of gas of 3 and 48/100 of a cent. And if the Newark Natural Gas and Fuel Company sold six hundred million cubic feet it would amount to $20,880, as the Newark Company's proportion for that special gas on that basis— at those figures.

Q. Do you know what amount of industrial gas was sold in these

other years—that is, relative to the total amount of gas consumed in the City of Newark?

A. I think the proportion will follow out pretty closely along the lines of nine hundred million cubic feet, domestic, in Newark; and six hundred million cubic feet for manufacturing purposes.

Q. What effect has the sale of industrial gas in this arrangement by the Newark Company—what effect has that upon the price paid for domestic consumption for gas?

538 By Edward Kibler: We object.

The Court: The objection is sustained. (Exceptions by defendant.)

Q. These matters of shop accounts and warehouse accounts—do those accounts appear frequently on your books as debits?

By Edward Kibler: I object. It is leading.

Q. Well, how do they appear on your books?

A. I can give the list of these entries—one against the other.

Q. Well, just do that.

A. In 1903, the bad accounts charged off were $2,766.50; loss on shop, $100.27; loss by mixers, $6.72. That makes a loss in that year of $2,873.49. The meter rentals and meter surrenders were included in the miscellaneous. In 1904, profit on shop, $411.03; warehouse adjustments $1,115.03. In that same year we had bad accounts of $2,339.46. That is all in that year. In 1905, shop, profit, $490.12; warehouse adjustments—a loss—$660.51; bad gas accounts $243.25. P. and L. expense account, $22.25. That covers that year. In 1906, we had a profit on shop of $625.73; P. and L. expense account $5.25; warehouse adjustment account, $274.08; bad gas accounts, $13.44. That is all in 1906. In 1907, shop account, $3,144.66; an adjustment of $204.28; bad gas accounts, $1,552.16. In 1908, profit on shop account, $345.84; warehouse adjustments, $60.43. Bad gas accounts, $9.62. P. and L. expense, $21.45. In 1909, profit on shop account, $197.93; warehouse adjustments, $137.49.

539 By Mr. Bolton: What year is that?

A. That is in 1909. We had bad accounts—loss—$332.44. P. and L. expense account $97.46; in 1910 we had a warehoue adjustment of $551.73; bad accounts, $13.06; P. and L. expense, $145.37. In 1911, shop account, $71.24; P. and L. expense, $1,001.71. A donation account of $10. Bad accounts $23.28; warehouse adjustment, $77.99. I think the credits will be a little larger than the debits. If they leave something out in one period, or if it is in transit, that material will be counted in as a loss because it is not there. And when it gets to its destination it is included in the next inventory and it will balance. And so, year in and year out, or for a period of years, there is a very little difference except in the fluctuation in prices of the material.

Q. What amount of depreciation did you charge off in the years 1910 and 1911? The Logan Company?

A. I think 3 and ½ percent in 1910 and 4 and ½ percent in 1911.

Q. In the other years, what depreciation on the books did you make?

A. We did not make any. The depreciation in 1910 and 1911 was a mere book entry. We did not have any sinking fund to represent the depreciation.

Q. Why was that?

A. Because there was no money to represent it. We merely put it in, to be allowed for the depreciation on our income returns.

Q. What would have been the effect on the Logan Company if this amount of 3 and ½ per cent had been deducted from the funds of the Logan Company and placed in a sinking fund—in actual cash—*and placed in a sinking fund—in actual cash*—to make up a sinking fund account?

By Edward Kibler: I object.

540 The Court: The objection is overruled.

By Edward Kibler: Note an exception.

A. You would have to apply that to some particular year.

Q. Well, I mean in 1903. What effect would that have upon your book value?

A. I don't know as it had any effect upon the book value. I can give the figures if you wish.

Q. What effect would it have upon the general finances of the company?

A. In 1910, the net, from operations of the Logan Company, were $1,369,475.64. From that amount, $390,491.72 went into betterments. We had $10,023,030.62, at 3 and ½%. It made a depreciation of $350,806.05. It would leave $628,177.87, on an investment of $10,000,000.

Q. About six per cent?

A. Yes, sir, a little over six per cent.

Q. Has any provision been made by the Logan Company up to date for a sinking fund for the purpose of amortization?

By Edward Kibler: If I knew what it meant, I would object to it.

The Count: You may consult the dictionary tonight.

A. In 1910, there would have been six per cent available on the investment; and in 1911, the earnings were less, and the amount of the investment was more. I have not the figures complete, but in 1912, the earnings were a little larger and the investment was a good deal larger. In 1911, they would leave us about four per cent, and in 1912 about five and one-half per cent. That is, cash

541 available. If you were to provide for a sinking fund. That figures the depreciation the same as I figured the depreciation upon the cost of gas. The investment at the beginning of the year, so as not to duplicate the investment, or depreciate the new properties you are working on during the year.

Q. The $60,000, which you say represented the franchise—what did that actually represent?

A. Well, we took it to represent a good many things; the franchise

value; the organization cost; interest and taxes during construction; working capital; rights of way; damages during construction.

Q. In other words, it is the value of the intangible property?

A. Yes, sir, the intangible value of the property, as close as we could estimate it.

By Edward Kibler: It would not be the intangible value——

The Witness: The value of the intangible property.

By J. R. Fitzgibbon: That is all.

Mr. DROLET.

Recross-examination.

Examined by Roderic Jones:

Q. You are not only a bookkeper, but you are an auditor?

By J. R. Fitzgibbon: We object to that. I object to their changing horses. I do not see the necessity of having two or three parties examine him.

542 By Mr. Jones: We have had a very elaborate chart presented and we ask that he be held for further examination if we desire. If they object to me going ahead, Mr. Bolton can go ahead.

The Court: Have you any other witness this evening?

By J. R. Fitzgibbon: We have some other matters but we do not want to go ahead until they get through with this witness. As I understand, they want to put some questions to him in reference to some matters which were drawn out in the re-direct examination.

By Edward Kibler: It is merely a question of whether counsel can relieve each other in a long drawn out examination.

The Court: Well, go ahead.

By Mr. Jones:

Q. You are not only a bookkeeper, but an auditor?

A. Yes, sir, I am.

Q. It is part of the duties of an auditor to distribute the accounts of the company?

A. Yes, sir.

Q. And to charge those things to profits which properly belong there?

A. Yes, sir.

Q. And to charge those things against investment which properly belong there?

A. Yes, sir.

Q. In regard to your answer to Mr. Fitzgibbon in regard to the Logan Company for the years 1910 and 1911, and the effect of the taking out of the depreciation you have stated the dividends that have remained for the Company?

A. The available funds, yes, sir.

543 Q. In each case, before you have done that, you have taken out of the profits the betterments for the year, haven't you?

A. Yes, sir.

Q. And which betterments you invariably charge against the investment?

A. All the investments that we have put in there has not increased our production.

Q. Well, that is not the point.

A. That is the point that emphasizes the inefficiency of that 3½ per cent.

Q. You have been charging the same amount against the profits and also against the investment, the same year?

A. In the answer to Mr. Fitzgibbon?

Q. As a matter of fact, that is what you did, didn't you?

A. No, sir. They are betterments which are credited to cash and charged to the investment, or credited to the equivalent of cash.

Q. But they are taken out of the earnings of the Company before you declared a dividend?

A. Yes, sir, they should be. I don't see what good it would do to——

By Edward Kibler (interrupting): He is asking whether they are or not.

A. All dividends are declared from the surplus.

Q. And you have done the same thing continuously in regard to the Newark Company, haven't you?

A. Done what?

Q. Paid for all the betterments out of the profits of the Company before you declared a dividend?

A. No, we didn't do that. I don't think that has been the policy at all. We paid a dividend whenever there was a surplus.

Q. You don't pay anything into the surplus until you pay for the betterments.

A. We pay a fair profit, and if there isn't enough left
544 after paying a fair profit, we borrow the money, and make the improvement. That has been the trouble right along.

Q. You have shown on the chart marked S the net profits of $442,000.00. That is a mistake. It should be $472,000.00.

A. Yes, sir.

Q. And you have shown the aggregate of betterments?

A. Yes, sir.

Q. You testified on Friday that that aggregate ought to be taken out of the net profits, in order to show the net profits, didn't you?

A. If you have a plant at the beginning of 1902 that has $182,000 in money invested, and from 1902 you operate the plant, and make a certain amount of money, and return a portion of the money to the betterment of the plant, that can be charged up to the plant.

Q. In the same year, you charged it to the profits and also to the investment.

A. I didn't charge it there. That shows the betterments on there.

Q. And you charge the betterments as an additional investment each year?

A. No, sir, it is not charged; it merely says betterments for the year.

Q. Now, take 1905, isn't that amount, $14,747.11, the exact difference between the investment as you have stated it for 1905 and 1906?

A. Why, certainly.

By Mr. Jones: That is all.

The Court: We will adjourn now.

(Here court adjourned until 9 o'clock a. m.)

545 (9 o'clock a. m., Morning Session.)

Mr. DROLET.

Cross-examination (resumed).

Examined by Mr. Frank A. Bolton:

Q. Now, Mr. Drolet, you have given a comparative statement of investment, earnings, expenses and dividends of the Logan Natural Gas and Fuel Company for years 1902 and 1911, inclusive.

A. Yes, sir.

Q. Have you a copy of that?

A. Yes, sir, I have.

Q. Under the head of investment, beginning of year, 1902, you have $3,297,065.20; for 1903, $5,518,520.30; taking the figures for 1904, $6,973,857.37; and 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, and you make the grand total $68,215,847, do you not?

A. Yes, sir, that is the total that I arrived at through my computations. I made it hurriedly, and I will not vouch for its accuracy.

Q. You have examined it since, and have found that it is wrong?

A. How?

Q. Have you examined it since?

A. No, sir, I have not examined it.

Q. Well, do you know whether it is right or wrong?

A. No, sir, I will not vouch for it.

Q. Well, will you vouch for any of the figures that you have given?

A. Yes, sir, I will. The time allowed me by the court to make the statement was so short, that I did not have sufficient time to make my computation. These percentages, I wish to state, are my computations.

Q. Add those figures, Mr. Drolet.

546 By J. R. Fitzgibbon: Well, that is a matter of addition.

Q. I will ask you if, as a matter of fact, it is not $79,215,847?

A. It is possible, yes, sir. An increase of ten million dollars in the investment. I won't vouch for it. That would make a correction of ten million dollars. That is in our favor.

Q. Now, you show the gross receipts, beginning in 1902, $178,812.43.

A. Yes, sir.

Q. Is that actual money?

A. Yes, sir, that is actual money.
Q. Received?
A. Yes, sir.
Q. In the year 1903, the figures that you have given there under that same head of gross receipts—is that actual money received by the company?
A. Yes, sir, that is actual money received.
Q. In 1904, are the figures placed under the head of total gross receipts money actually received?
A. Yes, sir.
Q. And in 1905?
A. Yes, sir, the same.
Q. And the same in 1906?
A. Yes, sir.
Q. And the same in 1907?
A. Yes, sir, the same.
Q. 1907, 1908, 1909, 1910 and 1911—are they the same?
A. Yes, sir, the same.
Q. Under the head of miscellaneous earnings, in 1903, on the same chart, you have $21,732.51?
A. Yes, sir.
Q. I want to know if that was actual money received?
A. No, sir. That does not all represent actual money. In the time which the court allowed me to make the statements, it would have been impossible to make separate earning sheet, analyz-
547 ing the miscellaneous earnings. That represents meter rentals and oil earnings and warehouse adjustments, as well as P. and L. expense account.
Q. It means actual receipts of the company?
A. Actual receipts, except the warehouse adjustment account. Those are set off by the other side.
Q. Then you don't claim that that represents real money?
A. It represents an earning.
Q. It isn't real money?
A. On the increase of the price of the material, which we carry in the warehouse; and changes in price. It is really not a receipt of money, but it is accrued.
Q. It is due the company in that year?
A. Yes, sir. We count it as an earning.
Q. Your total gross earnings were $178,812, and that represents a total for that year; and the other totals on the same chart from 1903 to 1911, represent the totals of the gross earnings of the company?
A. Yes, sir, for those years.
Q. And the grand total of the gross earnings is $21,207,105.39?
A. Yes, sir, that is right.
Q. On the same chart you have exhibited here under the head of total expenditures in operating——
A. Yes, sir.
Q. $131,881.93, for 1902?
A. Yes, sir.

Q. That is the total operating expenses?

A. That includes gas purchased and property expenses and also the debits on the other side of the warehouse adjustment account, and P. and L. expense account. It represents all the charges which should go against the total which we show as gross earnings.

548 Q. In 1902, you represent, as your net operations $46,930.50?

A. Yes, sir.

Q. For 1902?

A. Yes, sir.

Q. In 1903, $563,609.34?

A. Yes, sir, that is right.

Q. And the succeeding figures, under the head of net from operations, are all the net receipts of your company?

A. The net receipts from operations, yes, sir.

Q. During the years on this schedule?

A. Yes, sir. From 1902 to 1911.

Q. And the net amount from operations of the company amounted to $10,467,132.26?

A. Yes, sir, that is right.

Q. In the year 1902, you had interest charges against the company amounting to $68,000?

A. Yes, sir.

Q. And, in the succeeding years, under the same heading, you had additional interest charges from 1903 to 1911 amounting to $1,863,083.47?

A. Yes, sir.

Q. That is money that was actually paid out by the company as interest?

A. Yes, sir. That was paid out by the company as interest.

Q. Now, after paying your interest, the net earnings to your surplus are indicated on that chart?

A. Yes, sir.

Q. You had a shortage in 1902 of $21,672.89?

A. Yes, sir.

Q. And the succeeding year you had a surplus of $411,046.03; and the other surpluses which you have indicated on the chart from 1903 to 1911 show a net surplus, after deducting your operations from the field and operating expenses and interest paid—you have a net surplus of $8,604,000?

A. Yes, sir. For the ten years.

Q. The first cash dividend was paid in 1904?

A. Yes, sir.

549 Q. And that was $360,000?

A. Yes, sir.

Q. From 1905 to 1911, they aggregated $4,760,000?

A. Yes, sir.

Q. That was paid out in cash?

A. Yes, sir.

Q. And you had an actual cash, or its equivalent, balance of $3,844,048.79, at the end of 1911?

A. Yes, sir. A cash balance, or its equivalent.

Q. And the only item that is not represented by cash is your shop account, or warehouse adjustment account?

A. Yes, sir. We consider that a cash surplus, after paying those dividends from the operation.

Q. In December, 1911, on the sheet appended to this chart, you claim that you have a surplus of $647,824.22. Is that right—in December, 1911?

A. I wish to state as to that surplus tha. the surplus actually represented is $83,818.26 on the books; but in order to make your comparisons carry out, I have left the amount of depreciation which we have charged off in 1910 and 1911 in the surplus account.

Q. That is represented by cash, too, isn't it?

A. It is represented by cash, or the property for which it was spent. It is represented by cash, or its equivalent.

Q. By cash?

A. No, sir, by cash or its equivalent. If you will notice how much money was spent, you will see that the surplus was not represented by any cash, but by its equivalent, which means that that money was spent and put back into the property. And when you say that any surplus represents cash, it is a mistake.

Q. You had a balance of cash, $83,000?

A. No, sir, that was not the balance of cash.

Q. What does that represent?

A. It represents surplus. It can be property or money that
550 you have invested in your property. If I had put in the amount of depreciation which we charge as a book entry, for 1910 and 1911, it would have destroyed the means of seeing what the operations were, net, each year; and that statement of the Logan Natural Gas and Fuel Company in 1911, shows that the depreciation account has been merely a book entry account. I have eliminated the depreciation from the property account, and also included it in the surplus, to make the comparison.

Q. Now, in making up your schedule for the years 1902 to 1911—the statement that I just referred to—did you take into account in that schedule deductions for depreciation?

A. No, sir.

Q. They were not taken into account at all?

A. No, sir. I could not balance an account for the earnings if I did.

Q. Your total expenditures from 1902 to 1911 amounted to $10,739,973.13?

A. Yes, sir.

Q. That is the total operating expenses?

A. Yes, sir.

Q. And the interest charges, $1,863,083.47?

A. Yes, sir.

Q. And you paid out, in dividends, $4,760,000?

A. Yes, sir.

Q. And that netted $17,363,056.56—the total amount paid out by the company during that time?

A. I suppose those figures are right. I didn't figure the amount.

Q. And the total amount received during that time from operations amounted to $21,207,105.39?

A. Yes, sir.

Q. So that you had a balance of $3,844,048.79?

A. Do you mean a balance in cash?

551 Q. A balance, to surplus?

A. Yes, sir. Showed a book surplus of that much, but no cash.

Q. No cash?

A. No, sir. That was not represented by cash. That surplus was represented by money that had been returned to the property. It was represented by additional investment. I gave an account of those earnings to prove them up.

Q. I understood from your examination in chief by Mr. Fitzgibbon—I understood you to say—in reference to the receipts of the Newark Natural Gas and Fuel Company, that you received $623,875.75, in excess of the amount received from net receipts from gas operations. Did you make that statement?

A. How much?

Q. $623,875.75. That is, the Newark Natural Gas and Fuel Company received that much outside of gas operations.

A. I believe I did; yes, sir. If I said it, I believe it is right.

Q. Have you any means of knowing whether that is true at this time?

By J. R. Fitzgibbon: That is a matter of computation, I suppose. (The witness figures.)

A. The property sold for $491,322.14; and interest earnings were $104,569.63.

Q. And you had a balance, did you say, from a former surplus?

A. I couldn't tell you what the balance from the former surplus was, because it was all mixed together.

Q. Didn't you testify in your examination in chief what it was that you received? Outside of gas earnings—$623,875.75; and that the Logan Company paid the Newark Natural Gas and Fuel

552 Company $480,000 for the property of the Newark Natural Gas and Fuel Company outside of the City of Newark, and received $104,000 for interest, and $38,915 was added from a former surplus. Didn't you testify to that?

A. I made the computations for Mr. Fitzgibbon; and I took the balance of the surplus which he had. I would have to go through and analyze the surplus account from 1902 to 1912 to arrive at what was paid out.

Q. Then your statement of the gross amount received, including the surplus, was not correct, was it?

A. There was a former surplus in there.

Q. In 1904?

A. Yes, sir.

Q. How much was it?

By J. R. Fitzgibbon: That is a matter of computation.

The Witness: I would have to analyze the surplus account. We tried to keep the two separate—before 1902 and afterwards; and we merely threw all the surplus into one account and it would take a lot of work to analyze that for you.

Q. What were the total receipts from all sources, outside of the net earnings, from gas? Was it $623,875.75?

A. No, sir, that is not the total receipts.

Q. What are the total receipts?

A. $491,322.14, from the sale of property, $104,337.46, interest, $472,569.63, net earnings from gas operations.

Q. That is the total?

A. No, sir, that is not the total.

Q. Well, I want the total.

A. I would have to go through and pick out all the P. and L. accounts and the closing accounts.

553 Q. You had $166,353.13 as a surplus in 1911, did you? On December 31st?

A. Yes, sir. We showed that as a surplus. But that was not a cash surplus.

Q. I would like to have the total amount of receipts of the gas company from 1902 to 1911.

A. It would take me a good while to analyze that.

By Mr. Bolton: We want to know the total earnings of the Newark plant.

By J. R. Fitzgibbon: He went over the figures yesterday.

By Mr. Bolton: Well, if you are satisfied from these figures, we are.

By J. R. Fitzgibbon: Yes, sir.

By Mr. Bolton: If you can get any satisfaction from those figures, all right.

Q. Referring again to the chart showing a comparative statement of investment, earnings, expenses, and dividends of the Logan Natural Gas and Fuel Company for the years 1902 to 1911, inclusive: I will ask you again if the total operating expenses of the company were $10,739,973.13?

A. Yes, sir, the total operating, gas purchased, and miscellaneous P. and L. account.

Q. I will ask you whether or not the $10,739,973.13 represents the total expenditure of the Logan Company in its operations from 1902 to 1911, which includes the $7,540,777.17 which you have charged for betterments?

A. You ask if the total expenditure of $10,000,000 includes the $7,000,000?

554 Q. Yes, sir.

A. No, sir, it does not. Not one cent.

Q. After paying your dividends of $4,760,000 and the interest of $1,863,000 and the total expenditures of $10,739,000 you have a total expenditure of $17,363,000, approximately, haven't you?

A. Yes, sir, approximately $17,000,000.

Q. Your total gross earnings were $21,207,105.39.

A. Yes, sir.
Q. And that left you a total surplus of $3,844,000?
A. Yes, sir.
Q. Will you please explain to me how you could spend $7,540,777.17, and have a surplus of $3,844,000 at the end of that time?
A. If you will turn to that statement there (indicating paper:) The Logan Natural Gas and Fuel Company had net earnings of $8,604,048.79. That is at the bottom. They had miscellaneous receipts, $8,383.87; and stock issued in settlement of loans, $3,560,000. The accounts payable were increased $206,671.62; there are miscellaneous receipts, Elyria and Lorain surplus account, $8,383.87. The deficit for the year 1902, $21,672.89; and in order to make the betterments of $7,540,777.17, and pay dividends of $4,760,000, and paid bonus settlement of loan, $100,000, it required $12,400,777.17; and when the net earnings were $8,604,048.79 the difference was $3,796,728.38. That accounts for the earnings absolutely. The statement is tied in, and it cannot be otherwise.
Q. You had a surplus in 1902, when you started in operation?
A. Yes, sir.
555 Q. And $3,303,775.43, together with $3,844,048.79, made up a grand total of $7,147,824.22.
A. Just exactly, yes, sir. And of that $7,000,000——
Q. (Interrupting.) And you issued stock——

By J. R. Fitzgibbon (interrupting): Let him answer.

A. Of that, $7,540,000 was represented by properties—new investment which we had put back. And in 1911, the surplus was $747,824. That was not a cash surplus, but was represented by property.
Q. The surplus amounted to $7,147,824.22?
A. I suppose so.
Q. And you issued $6,400,000 of stock against that?
A. Yes, sir.
Q. And that left a surplus of $747,000?
A. What did that stock dividend represent? The dividing of the interest into smaller parts.
Q. You got it in surplus.
A. We didn't get it from the earnings of the plant.
Q. You got it from the receipts of the Company, didn't you?
A. How could we get it from the receipts?
Q. From the yearly receipts of the Logan Company.
A. If we earned eight million dollars, and if we must spend seven million five hundred thousand in betterments, how can we pay four million seven hundred thousand dollars cash dividends? Don't we have to borow the money?
Q. Did you use the surplus?
A. Yes, sir, of course.
Q. The old surplus?
A. Yes, sir.
Q. Those two surpluses amounted to $7,147,824.22?
A. Yes, sir.

Q. And, as against that, you had $7,000,000 of better-
556 ments for those years. And that left a deficit of $392,000, instead of a surplus of $747,000, which you have exhibited. Isn't that a fact?

A. We had a surplus, before June 1, 1902, of $3,295,391.56. Miscellaneous receipts, credited to old surplus, $8,383.87. Then we had net earnings to surplus, from June, 1902, to December, 1911, $8,604,048.79. And that made a total surplus—old and new—of $11,907,824.22; and of that surplus, we paid a cash dividend, from June, 1902, to December, 1911, of $4,760,000. We paid a stock dividend, in the year 1911, to equalize the investment, of $6,400,000. That left a surplus, in December, 1911, of $747,824.22.

By Edward Kibler: He is not answering the question.

The Court: Read the question.

(The stenographer read the question.)

A. No, sir, it is not a fact. You cannot charge a betterment against a surplus account. How can you charge a betterment against a surplus account? You can charge dividends against surplus.

Q. You claim to have expended, in the operation of the company, in addition to your total expenditures of $17,000,000, that is, including dividends, interest, and field operations—in addition to that, you claim to have expended $7,540,000 in betterments?

A. Yes, sir.

Q. If you actually expended that much in betterments—it has to show up against the property of the company, doesn't it?

A. It is merely a charge to your investment.

557 Q. It has come out of the revenues of the company, hasn't it?

A. Not necessarily. You can borrow money to make the extensions.

Q. You have not a balance at all, according to your books.

A. What are you talking about? We have been showing those books to the most practical men for five years. Do you think we can fool them?

Q. I don't know what you can do at all.

A. The surplus prior to June 1, 1902, was $3,295,000. Miscellaneous receipts, credited to old surplus, $8,383.87. Net earnings to surplus, June, 1902, to December, 1911, $8,604,000. That makes a total surplus of $11,907,000. Did you get that?

A. I have it just exactly as you have it.

By J. R. Fitzgibbon: Then there ought not to be any difference.

By Mr. Bolton: Well, I have the figures.

The Witness: Well, if you can show a new way of doing it——

By the Court: Any errors that may appear in these charts by way of additions, I wish you would correct them.

A. Yes, sir.

By Mr. Jones: I want the original figures left in the chart marked S, so that we can see what they were.

By Mr. Bolton: I want the total receipts of the company. I would gladly give them to you if you would give me time to work them out. I will submit them to you as quick as I can get them.

558 By Mr. Bolton: Well, that is all.

The Court: Have you any further questions?

By Mr. Fitzgibbon: Yes, sir.

MR. DROLET.

Redirect examination.

By J. R. Fitzgibbon:

Q. Referring to Chart S: This is the statement showing the net earnings from gas operations of the Newark Company. Calling your attention to the year, 1911: Amount received from gas sold, $252,954.28. Does that represent any money received for gas sold in excess of the 18 cent rate prescribed in this ordinance?

A. That is, for 1911?

Q. Yes, sir, 1911.

A. There is included in that $252,000, the sum of $18,047.29.

Q. That is included in the amount received for gas sold of $252,000?

A. Yes, sir. There was about 400,000,000 cubic feet at the difference.

Q. That is the money that is held in escrow.

A. That is not the entire money—that would represent the amount in escrow.

By Edward Kibler: What is the amount held in escrow?

A. I cannot tell you. I have not the figures.

By Edward Kibler:

Q. The $18,047, is what?

A. The difference between the gas, at 18 cents and 22½ cents, sold.

559 Q. What difference does it make in the net amount received by the Newark Company?

A. The Newark company would get 30% of that amount—$5,414.

Q. And that would make what difference in the net receipts from gas operations by the Newark plant for the year 1911?

A. Figuring it all at the 18 cent rate, would make it about $43,190.73. That is approximately.

Q. Now, will you make those changes on this sheet and designate them——

By Mr. Jones: So as to show the original figures, and the new figures.

By J. R. Fitzgibbon: Yes, sir.

A. Do you want to change them now?

By Mr. Jones: Well, I don't want the figures changed.

The Witness: I will just put the other figures in red ink.

By Mr. Fitzgibbon: Calling you- attention to this balance to surplus of the Logan Company, as shown in the total—$3,844,-048.79—what does that surplus represent?

A. What is the question?

Q. Calling your attention to the surplus in the statement of the Logan Company——

A. Prior to June, 1902?

Q. No, sir. On this statement here.

By Mr. Fitzgibbon: I wish the stenographer would mark this as an exhibit.

(The stenographer marked the paper, as requested, U.)

560 Q. Referring to that $3,844,048.79—what does that represent?

A. That went to the surplus account. It did not represent any cash by a long ways.

Q. Well, what I want to know is whether or not that represents any money in the investment—put back in the field; whether that $3,000,000 went back into the property.

A. There was $3,295,000 worth of surplus prior to June 1, 1902; miscellaneous receipts credited to old surplus, $8,383.87; and there was $8,604,000 of net earnings to surplus, June, 1902, to December, 1911. During those ten years. And that made a surplus—a total surplus of $11,907,000. And our dividends, June, 1902, to December, 1911, $4,760,000; and stock dividends, in 1911, $6,400,000.

Q. Mr. Drolet do you know what arrangement is made between the Newark Natural Gas and Fuel Company and its industrial customers?

A. Yes, sir.

Q. What is that arrangement?

A. They have a contract and agreement to use gas; the gas company, without notice, at any time, may come there and turn the gas off to protect domestic consumers at any time.

By Edward Kibler: I object to that as not being competent.

Q. Do you know what the per cent of cash dividends paid upon the investment of the Logan Natural Gas Company from 1902 to 1911, inclusive was—the per cent of cash dividends on the investment?

A. I don't know. I think it would approximate about seven per cent cash on the investment.

By Edward Kibler: What is your answer?

A. Approximately seven per cent.

561 By Mr. Jones: I move to rule out that answer because that is one of the things that is on this chart——

The Court: It is overruled.

The Witness: I just stated it approximately.

Q. Mr. Drolet, you stated that the net earnings of the Logan Natural Gas Company from 1902 to 1911, inclusive, aggregate $8,604,048.79; and that during that time $4,760,000 or approximately 6 and ½ per cent was paid as dividends to the stockholders. Can you state where the additional funds were secured to allow the Logan Company to spend $7,540,777.17 upon the betterment to the property?

A. The total amount paid out for new investment to properties, $7,540,000—for betterments to the property; $4,760,000, paid out as dividends; $100,000 was paid in settlement of bonus account; it is still on the books, and has not been charged off; and we had to have $12,400,777.17, in order to do that—in order to pay the dividend of 7%, and to make the improvement of $7,000,000. We had to have $12,400,000. And we received, of that amount of money, $8,604,000, from earnings from the plant; and we borrowed three million four hundred and some thousand dollars; and the stockholders issued stock and parted with that much interest for the settlement of that loan; and they increased their accounts payable. They borrowed $3,796,000, in order to meet those expenditures.

Q. Mr. Drolet, what effect has the increase in the investment of the Logan Company in each year since 1902—what effect
562 has that had upon the increased production of the Logan Company of gas during those years?

A. We produced less gas in 1911 than in 1903. Our production has not been one of increase. Our new investments have been merely to maintain our production; and in order to maintain the production, we must drill wells; 90, or 100, or 110 wells. The drilling of every well does not only incur the expense of drilling the well, but the investment; the pipe in the well and the different lines in the field; and that investment is absolutely necessary. We call it an investment. In reality it could be considered an expense. It is a matter of necessity. We must do it in order to maintain the production. That is one of the big elements of depreciation which enters into the natural gas business—in the production end of it—the absolute requirement of that investment.

By Mr. Fitzgibbon: That is all.

K. C. KRICK (Recalled), being first duly sworn, as provided by law, testified as follows:

Examined by J. R. Fitzgibbon:

Q. Calling your attention, Mr. Krick, to the notice published in the Newark daily papers at or about the time of the passage of this ordinance, of an increased rate to be charged by the Newark Natural Gas and Fuel Company, as read in evidence here, in the City: What knowledge have you concerning those notices—where they came from and who caused them to be served?

563 A. Following the passage of the ordinance in question, a conference was called at Pittsburgh, which I attended. It was the sense of——

By Mr. Jones (interrupting): I object.
The Court: The objection is sustained.

Q. What was done?
A. It was decided that the rate could not be borne by the company.

By Mr. Jones: I object.

Q. By what company?
A. By the Logan Natural Gas and Fuel Company.

By Edward Kibler: How is that competent?
The Court: What was said, would not be competent.
By Mr. Fitzgibbon: I am not asking for what was said.
By Edward Kibler: If they promulgated this notice, it speaks for itself.

The Witness: The conference was held, and, under the direction of our president, Mr. Whitcomb,——
Q. (Interrupting.) President of what company?
A. The Logan Natural Gas and Fuel Company. A notice was prepared which I delivered to Mr. Carl—the local agent of the Newark Natural Gas and Fuel Company, with instructions to have it published, and with instructions to issue it to the consumers in Newark.

564 Q. Now, in the last year or two, do you know of any municipality purchasing the gas for the benefit of its customers at competitive bidding, and, if so, what municipality, and what price was paid for it?

By Mr. Jones: We object.
The Court: Within what field?

Q. In this field—within twenty-five or thirty miles of Newark.

By Edward Kibler: That is not competent, and we object to it.
By J. R. Fitzgibbon: Lancaster was required to buy gas, and bids were submitted to furnish Lancaster with gas for 1911. We want to show what the bids were, and what the contract was that was entered into at that time, as reflecting upon the wholesale price of gas to a distributing company in 1911.
The Court: We will sustain the objection.
By J. R. Fitzgibbon: Note an exception. And we offer to prove that, in 1911, Lancaster, which owns its own natural gas plant, asked for bids for furnishing gas to it, to be distributed through its mains, and that a contract was entered into at the rate of seventeen cents a thousand cubic feet, and we wish an exception. That is all.
The Court: Have you any cross-examination?

565 By Mr. Jones: I think not.
(There was no cross examination.)
The Court: We will adjourn now.

(Here court adjourned until one o'clock p. m.)

(One O'clock p. m., Afternoon Session.)

By Judge Douglass: We have sent for a form of the contract with the industrial consumers. We desire to offer it in evidence when it comes.

Depositions were taken in this case by the plaintiff, and I desire to introduce the cross examination of T. N. Barnsdahl, in his deposition. I do not care to read it now. I wish to introduce the entire cross examination.

By Mr. Jones: The objections to the questions put there are of the same general character as the objections which were overruled by the court, as to the market price of gas and so on, and we want the same exceptions.

The Court: Very well. You may have the same exceptions.

By Judge Douglass: That is our case.

The Court: You may introduce the contract in evidence when it comes.

The charts made by the last witness have not been offered.

566 By J. R. Fitzgibbon: That is a matter that we do not think is relevant to this case. It was asked for by counsel on the other side. That refers to the chart as to the Logan Company marked "U."

By Mr. Jones: We offer it in connection with Mr. Drolet's cross examination—all four of those papers.

By Mr. Fitzgibbon: Well, I wish to object to them and take our exceptions, and we will make known in our argument our reasons for objecting to them.

(The papers above referred to were here marked by the stenographer "U," "U-1," "U-2 and "U-3." True copies of said papers so marked, are hereto attached, made parts hereof.)

By Mr. Fitzgibon: We offer the chart marked "S."

(A true copy of chart "S," is hereto attached, made part hereof.)

By Mr. Jones: Now, in the deposition of Mr. Barnsdahl, we offer the re-direct examination of Mr. Barnsdahl in that deposition.

The Court: You can offer that contract when it comes.

By Mr. Fitzgibbon: Yes, sir, we rest.

(A true copy of the deposition of T. N. Barnsdahl, made part hereof, as follows:)

567 STATE OF OHIO,
*Licking County, ss:*

No. 16000.

THE CITY OF NEWARK, OHIO, by FRANK A. BOLTON, Solicitor, Plaintiff,
vs.
THE NEWARK NATURAL GAS AND FUEL COMPANY.

*Depositions.*

By agreement of counsel the signatures of witnesses waived.

T. N. BARNSDAHL, a witness on behalf of plaintiff, being duly sworn according to law, testifies as follows:

Examined by plaintiff's attorney.

Q. What is your name, full name?
A. Theodore N. Barnsdahl.
Q. Place of residence?
A. Pittsburgh.
Q. Your age?
A. Sixty.
Q. Mr. Barnsdahl, what, if anything, did you have to do with the purchase of the Newark Natural Gas and Fuel Company stock from E. H. Everett and his associates in 1898?

Objection by defendant and exceptions.

A. Yes, I had something to do with the buying of that property. It is a long time ago. If I remember correctly, I figured with Mr. Everett and Orville Johnson, and finally we came to an understanding and I bought the property.

568 Q. Who was Orville Johnson?
A. I think his name was Orville. He was then with the Columbus Gas Company.
Q. How much did you pay for the stock that was purchased?

Objection by defendant and exception to all this class of testimony.

A. If I remember correctly, I paid $136,000.00, or in that neighborhood.
Q. Who was associated with you in this transaction?
A. I think I did it mostly myself, although Lupher Brothers were interested with me in the deal.
Q. Did the Hamlins have some interest in it too?
A. Yes, the Hamlins had some interest in it.
Q. Anyone else that you know of?
A. There might have been, but I can't tell. Those men I know.
Q. Mr. Olmstead of Coudersport?

A. Yes, Judge Olmstead had an interest.

Q. How many shares of the Newark Natural Gas and Fuel Company did you purchase?

A. I do not know.

Q. Was the entire issue of outstanding stock purchased?

A. If I remember correctly, it was.

Q. What position do you hold with the Union Natural Gas Corporation?

A. I am President of it.

Q. How long have you been President of it?

A. Since it was organized.

Q. When was it organized?

A. I can't remember nine or ten years ago.

Q. Was it not 1902?

A. It might have been.

Q. Mr. Barnsdahl, you afterwards sold, or purchased all the outstanding stock of the Newark Natural Gas and Fuel
569 Company yourself, did you not, from the Hamlins and Olmsted of Coudersport?

A. We organized the Union Natural Gas Corporation, and I think that was bought of them. They took part stock and part money. It went into the Union Natural Gas Corporation.

Q. The Union Gas Corporation purchased the Logan Natural Gas and Fuel Company, did it not, the stock?

A. Yes, it all went in.

Q. And the Buckeye Gas Company?

A. Yes, sir, I think it all went in.

Q. Any other company besides?

A. I don't know of any in Ohio.

Q. When, with reference to the time that you purchased the stock of the Newark Natural Gas and Fuel Company, was the Logan Natural Gas stock purchased?

A. I bought the Logan before I bought the Newark.

Q. Who was associated with you in that transaction?

A. The same people.

Q. And in the same proportion of stock?

A. That I can't remember.

Q. What is your recollection of it?

A. I would think that it was the same proportion, although I am not positive.

Q. Up until the time the stock was purchased by the Union Natural Gas Corporation these people continued to own the stock of the Logan Natural Gas and Fuel Company and the Newark Natural Gas and Fuel Company, did they not?

A. Yes, I believe they did.

Q. And in the same proportion?

A. I think so.

Q. When the Union Gas Corporation purchased the Logan Natural Gas and Fuel Company and the Newark Natural Gas
570 and Fuel Company, they purchased all the stock of both those companies?

A. That is my recollection.

Q. And the Union Natural Gas Corporation has owned them ever since?

A. Yes, that is right, they own it.

Q. At the time the Newark Natural Gas and Fuel Company stock was purchased were you in Newark?

A. I had been in Newark a number of times, and I probably was there at the time the deal was closed.

Q. Was there any statement made to you and your associates of the liabilities of the company?

A. Yes, I believe there was. The Company was out of gas and that is why they sold out, and we had to lay lines to Sugar Grove to furnish them gas.

Q. Whom do you mean by we laid lines?

A. That was the Logan Company.

Q. The Logan Natural Gas and Fuel Company laid the lines for the Newark Natural Gas and Fuel Company from the Sugar Grove field to Newark?

A. Yes.

Q. And the gas main extending the Sugar Grove line to the City of Newark was laid by the Logan Natural Gas and Fuel Company?

A. As I remember, it was.

Q. The object of purchasing the stock of the Newark Natural Gas and Fuel Company was, at that time, to obtain a market for the Sugar Grove gas that was owned and controlled by the Logan Natural Gas and Fuel Company, was it not?

A. Yes, we had gas and they were out of gas and it gave us a chance to buy the property very cheap.

Q. You purchased the franchise of the Newark Natural Gas and Fuel Company, and the stock?

A. If I remember correctly, we did.

571 Q. Have you been President of the Union Natural Gas Corporation since its organization?

A. Yes.

Q. Who was President of the Newark Natural Gas and Fuel Company and the Logan Natural Gas and Fuel Company, prior to——

A. I guess I was President of the Logan. I don't remember whether I was President of the Newark, or not.

Cross-examination.

By defendant's attorney:

Q. Mr. Barnsdall, at the time of this stock purchase, the Everett Purchase in 1898, state generally what the condition of that local company was when you made this stock purchase?

A. They were practically out of gas.

Q. Did they have any holdings around about or in any field in which they could get gas?

A. Not that was developed or known then. There might have something afterwards come in, but they had no gas when we bought the property, that is, very little.

Q. Taking your knowledge of the gas business as a basis, what effect did that have upon the value of the plant known as the Newark Natural Gas and Fuel Company, or the Everett property?

Objection and exception.

A. Well, of course, that would not make the plant have much value to it, being out of gas.

Q. Mr. Barnsdall, taking the Newark plant as you know it now what do you say its value is at this time?

Objection and exception.

A. It is worth a great many times more than it was worth when we bought it. It is probably worth five or six hundred thousand dollars.

572 Q. The purchase that you made of this plant was a stock purchase only?

A. Yes, if I remember it right it was stock.

Q. Mr. Barnsdall, you may state about how long you have been engaged actively in the business of developing and distributing either oil or natural gas?

A. I have been producing oil for a great many years, forty some odd years, forty-four years, I believe.

Q. How long in the gas business?

A. I first went into that in 1887.

Q. Have you a general knowledge of the Ohio fields?

A. Well, yes, I am pretty well acquainted there.

Q. State what fields you have operated in.

General objection and exception.

A. I have operated in the Sugar Grove field, the Homer country, then over near Ashtabula, at Marietta and Newport, Ohio.

Q. In West Virginia?

A. Yes, I was in West Virginia.

Q. In Pennsylvania?

A. Yes, in Pennsylvania—Warren and Bradford.

Q. Indiana?

A. Yes, I was in Indiana in several towns there.

Q. In Kansas?

A. Yes.

Q. Oklahoma?

A. Yes, Oklahoma.

Q. Right up to the present time you have been actively interested?

A. Yes.

Redirect.

By Mr. Bolton:

Q. How many miles of pipe are there in the Newark plant?

573 A. There are a good many miles, I do not know how many.

Q. How many consumers?

A. In Newark, I don't know.

Q. What are the average monthly receipts of the plant in Newark?

A. I would have to get that from the books.

Q. What are the yearly receipts?

A. I would have to get that from the books.

Q. Mr. Barnsdahl, has there ever been any money expended upon the physical property of the Newark Natural Gas and Fuel Company other than money that has been taken in in the course of the business by the Company?

A. I think, to start with, we had to spend some money that we had not taken in, that is, buying the plant, quite a lot. The town was not all piped and we had to go ahead and pipe it.

Q. What books or records would show what money was spent in making the extensions?

A. That I do not know, whether it would be the Newark Natural Gas Company's books or not. It might be, or it might be the Logan Natural Gas and Fuel Company's books.

Q. The directors of the Logan Natural Gas and Fuel Company and the directorate of the Newark Natural Gas and Fuel Company were always the same during——

A. That I cannot say. I can't remember, but *there* were practically the same.

Q. The Newark Company was purchased by the Logan Company prior to being taken over by the Union Natural Gas Corporation?

A. The books will show. I can't remember.

Q. These two companies, the Newark Natural Gas and Fuel Company and the Logan Natural Gas and Fuel Company, were
574 owned and controlled up until the transfer to the Union Gas Corporation by the same individuals?

A. Practically the same.

Q. What do you mean by practically?

A. If there was any difference, I do not know. There might have been some difference, or might not have been. I can't remember.

STATE OF OHIO,
*Licking County, ss:*

Case No. 16000.

THE CITY OF NEWARK, OHIO, by FRANK A. BOLTON,
Solicitor, Plaintiff,
vs.
THE NEWARK NATURAL GAS AND FUEL COMPANY, Defendant.

Pending in Common Pleas Court, Licking County, State of Ohio.

The above named defendant will take notice, that on Thursday, the 9th day of November, A. D. 1911, the plaintiff above named will take the depositions of sundry witnesses, to be used as evidence in the

trial of the above cause, at the office of J. Frank McKenna, room 702 Frick Building in the City of Pittsburgh in the County of Allegheny in the State of Pennsylvania between the hours of eight o'clock a. m., and six o'clock p. m., of said day, and that the taking of the same will be adjourned from day to day, between the same hours, until they are completed.

(Signed) FRANK A. BOLTON,
*Attorney for Plaintiff.*

Service of the above notice is acknowledged, and proof of the official character of the officer before whom the said depositions may be taken is by agreement waived; also all exceptions as to time.

575

Done this 6th day of Nov., 1911.

(Signed) J. R. FITZGIBBON,
*Attorney for Def't.*

Pursuant to Notice service on attorneys for defendant, a copy of which is hereto attached, depositions were taken before J. Frank McKenna, Esq., at his office, 702 Frick Building, Pittsburgh, Pennsylvania, on November 9, 1911.

Appearance for plaintiff, Frank A. Bolton, Esq., City Solicitor, Roderic Jones, Esq.; for defendant, Hon. S. M. Douglass, Eugene Mackey, Esq.

All testimony offered was taken in shorthand, a transcript of which is herewith returned.

(Signed) J. FRANK McKENNA,
[NOTARIAL SEAL.] *Notary Public.*

I hereby certify that the foregoing is a correct copy of the notes of testimony taken at the above hearing.

(Signed) F. A. DOWLER.
*Stenographer.*

(A true copy of the form of contract heretofore referred to, marked V., made part hereof, is as follows):

*"Contract.*

"Made this — day of —— A. D. 190– Between the —— Company of —— Ohio, and —— ——.

"The —— Company agrees to sell to the said —— —— at —— Natural Gas for Fuel for the following service, viz: — by meter, at the following price or rate per thousand cubic feet, to-wit —

576 "This contract being for a period of — beginning — and to continue — in force after the expiration of the term named until either party gives ten days' notice of a desire to terminate the same, when it shall cease and determine. The —— Company agrees to use the said gas during the term hereof, subject

to the conditions and agreements printed on the back hereof, which are hereby made a part of this contract.

"Executed by the said parties the day and year aforesaid.

THE —— COMPANY.

Agent .....

(Sign here) .....

Approved:

.....

*Gen'l Contracting Agt.*

*"Terms and Conditions of This Contract.*

"Payment is to be made monthly at the office of the Gas Company; within the first fifteen days of the month next immediately following that in which the gas was delivered; and upon failure to so pay the gas supplied hereunder may be shut off.

"The Gas Company will provide a meter, and may, if it deems necessary, place upon such premises and keep in order a regulator to control the flow of gas, and shall maintain its mains and connections to said meter or regulator, and the consumer shall furnish, put in place and keep in repair, at his own cost, all other pipes, burners, appliances, valves, and fittings necessary to distribute and burn the said gas, which in size, kind and arrangement, shall be such as are approved by the said Gas
577 Company's superintendent, or properly accredited representative, and shall embrace the best devices in use for securing economy of gas consumed. And the said Gas Company, by its proper representative, shall have access to said premises at all times, to inspect meters, regulators, pipes, burners, appliances, etc., in use, and to witness and test the consumption of gas, and may require the consumer to replace or repair any pipes, burners, valves, fittings, or appliances, found to be defective, or wasteful, and the said Gas Company may, at its own cost add to the appliances in use by the consumer, any device of its own effecting a better combustion or a saving in the quantity of gas used. The said Gas Company shall retain the title and ownership of the meter, regulator, and all pipes, burners, valves and other property placed by it upon said premises, and may remove the same at any time before or after the termination of this contract, and no charge shall be made against the said Gas Company for the use of this land occupied by said meter, regulator, pipes, valves, devices and property.

"The consumer agrees to use the gas as sparingly as the proper operation of the said plant will admit of, and to allow no escapes or wastes of any sort to occur.

"As the production of gas from wells, and the conveyance of it over long distances, are subject to accidents, interruption and failure, and the consumption varies greatly with the weather, and it is the duty of said Gas Company to prefer its domestic consumers in all cases of shortage, the said Gas Company does not by this contract undertake to furnish to said consumer a full and uninterrupted

delivery of gas for the period named herein—but only to
578 furnish such a quantity and for such a length of time, limited by the terms thereof, as the wells and pipe lines of the said Gas Company are reasonably capable of, subject to the said Gas Company requiring a discontinuance of the use of its gas by the consumer temporarily, in whole or in part, during the continuance of this contract, without notice, at any time it may find it necessary by reason of accidents, breaks in line, repairs, cold weather, or shortage of gas from any cause whatever, and without prejudice to its right to deliver to other parties.

"No credits shall be allowed the consumer for any shortage or interruption of delivery from any cause whatever, in consideration of which the said consumer shall have the privilege of discontinuing its use either temporarily or permanently, without notice to the said Gas Company, provided, however, that notice be given in writing within seven days thereafter.

"And it is expressly understood and agreed by the consumer that the said Gas Company shall not be liable for any loss or injury that may result either directly or indirectly from such shortage or interruption. It is also understood that the said Gas Company shall not be liable to consumer, or to any of the agents, servants or employees of such consumer, or to any person for any loss, damage or injury, resulting from the use of gas in said plant, all risks in the said use being assumed by the consumer.

"The contract contemplates the use of gas for fuel only, for boilers, furnaces, forges, and other fuel purposes as specified herein, of the present size, capacity and load, and the meter supplied has a capacity predicated on said load. The price or rate for all gas used hereunder, is based upon a pressure of not more than
579 eight ounces to the square inch as the gas passes through the *the* meter, and if gas should ever be used hereunder at a greater pressure, then the multiple usual in the natural gas business shall be applied to the readings of the meter, and the same corrected accordingly. The consumer will not be permitted to use the gas at the rate specified in the contract, for heating stoves, illuminating purpose, gas engines, or to make any attachment of pipe not specified for herein, without first having an agreement therefor, endorsed hereon, and approved and signed as the contract is itself approved and signed.

"In case the meter be found defective or cease to register, until the same be repaired or replaced, the quantity of gas consumed shall be ascertained by the average of another meter, or by the amount consumed during a previous or corresponding period, or when it seems necessary to the Gas Company, an investigation may be made as to the amount consumed, by a comparison with the product or operation of the plant, and the consumer hereby agrees that every opportunity will be granted the Gas Company or its agents to make such investigation and to examine such records, books or papers as it may deem necessary for this purpose. In the event of the consumer's dissatisfaction with the accuracy of the meter, the Gas

Company will, upon written application at its office, have the same removed, and tested.

"This contract is positively nor transferable and shall be subject to cancellation by the Gas Company at any time for any one of the following causes:

"First. Wastefulness by the consumer in the use of gas.

"Second. Permanent and material reduction in the amount
580 of gas used, as compared to the service specified in the contract.

"Third. Refusal of the consumer to adopt appliances and devices in successful use to secure economy in the consumption of gas.

"Fourth. Neglect or default of the consumer to pay for any month's delivery of gas within the period herein limited for such payment, or any other breach of this contract.

"Fifth. The failure or material falling off of gas wells employed in delivering gas to the aforesaid plant.

"Sixth. Tampering with the mains, by-passes, regulators, meters, or other property of the Gas Company, or fraudulent representations in regard to the consumption of gas.

"And such cancellation shall be by written notice by the said Gas Company to the consumer, and thereafter the obligation or liability shall rest upon either party in regard to the unexpired portion of the term of said contract, and the said Gas Company may thereupon without notice, shut off the gas and remove its property from the premises.

"It is, however, further understood and agreed that in case an execution be issued against the consumer, or if the premises of the consumer mentioned in this contract, or the personal property thereon shall be levied upon under execution, or in case of assignment or other act of insolvency of the consumer, this contract, at the option of the said Gas Company, shall become null and void, and all claims for gas previously delivered shall become forthwith due and payable without notice from the said Gas Company, and the said Gas Company may shut off the gas without notice.

581 "The consumer further agrees to keep a limited supply of other fuel in stock at all times, so that if it is necessary for the Gas Company, for any reason, to shut off the supply of gas, no material injury or damage will result to the consumer.

"The consumer agrees not to furnish or sell any of the gas delivered to any other consumer, particularly if such other consumer is in arrears to the Gas Company for gas sold by it, and a breach of this agreement shall be sufficient ground for the Gas Company to discontinue the delivery of gas, and to cancel this contract.

"It is expressly understood and agreed between the parties hereto that the Gas Company shall not be liable for any alleged damages for any breach of this contract, unless the claim be presented in writing thirty days after the alleged violation thereof, and the failure to give such thirty days' notice shall be a waiver of any such damages, and no suit for the recovery thereof shall be brought or maintained in any court, State or Federal, unless written notice of the character, cause and amount of such damages be first given to

the Gas Company within thirty days after the commission or omission of the act which caused the same.

"In case of the discovery of leaks notice of the fact should be given at the office of the Gas Company, without delay, that the defects may be remedied, and the consumer will not attempt to locate the same with fires or lights, but if the same occurs in a building, he will throw open the doors and windows to allow the escape of the gas into the open air and will extinguish all fires and lights.

"This contract shall not be binding or in force until approved and signed by the General Contracting Agent of the
582 Gas Company, and no promise, agreement or representation of any Agent or employee made in soliciting same, or otherwise, will be recognized or made good by the said Gas Company, unless incorporated herein."

By J. R. Fitzgibbon: We rest.

(The witnesses for the plaintiff were called and sworn.)

J. S. GRAHAM, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Roderic Jones:

Q. Your name is J. S. Graham?
A. Yes, sir, it is.
Q. Where do you live, Mr. Graham?
A. I live in McKean Township.
Q. In Licking County?
A. Yes, sir, in Licking County.
Q. I will ask you whether or not you are engaged in the business of producing natural gas?
A. I am, yes, sir, in a small way.
Q. What, if any, disposition do you make of the gas that you produce?
A. We wholesale the gas.
Q. Where?
A. At the wells.
Q. What price do you get for it?
A. Five cents a thousand cubic feet.
Q. How much do you produce, Mr. Graham?
A. In what way?
Q. In a day, or any way that you wish to state it?
A. About a million a day.
583 Q. Who do you sell to?
A. To the Columbus Natural Gas and Fuel Company.
Q. Is that the company of which Mr. Stoughton is a representative?
A. It is, yes, sir.

By Mr. Jones: You may inquire.

J. S. GRAHAM.

Cross-examination.

Examined by Chas. W. Montgomery:

Q. Mr. Graham, this gas of yours is produced on your own farm, isn't it?
A. Largely so.
Q. It is practically all produced there?
A. Yes, sir, all but one well.
Q. And that is on a little piece of ground immediately adjoining your farm?
A. Yes, sir, it is.
Q. You have five or six wells on your own farm?
A. We have six.
Q. And one well in this small tract adjoining your farm?
A. Yes, sir.
Q. And you were at no expense except to put down the wells. You drilled the wells on your own farm, and one well on the little tract adjoining, and you sell the gas at wholesale rate at the wells?
A. Yes, sir.
Q. And you are several miles from any village or town, are you not?
A. Yes, sir.
Q. And you haven't now any market for your gas other than to sell it at wholesale?
A. Not on the place there.
Q. You haven't any market available other than the
584 Columbus Natural Gas and Fuel Company?
A. That is the contract; we sell to them.
Q. You don't agree to give them any designated amount?
A. No, sir.
Q. But simply what your output happens to be?
A. Yes, sir.
Q. And they are to take whatever the output is?
A. For a part of the year.
Q. You don't obligate yourself to furnish them a given amount?
A. No, sir.
Q. They take whatever the output may happen to be?
A. Yes, sir, for six months.
Q. What period is that?
A. Commencing the 1st of October and to the 1st of April.
Q. And in the summer time, you compel them to take a certain amount?
A. Yes, sir.

By Mr. Montgomery: That is all.

J. S. GRAHAM.

Redirect examination.

Examined by Roderic Jones:

Q. How long have you been furnishing gas at that price?
A. A little over two years.

By Mr. Jones: That is all.

585 J. HOPE SUTOR, being first duly sworn, as provided by law, testified as follows:

Direct examination.

Examined by Mr. Frank A. Bolton:

Q. What is your name?
A. My name is J. Hope Sutor.
Q. Where do you live, Mr. Sutor?
A. I live at Zanesville, Ohio.
Q. What is your business?
A. Public accounting.
Q. How long have you been engaged in the work of public accounting?
A. About ten years.
Q. Prior to that time what were you engaged in?
A. In private accounting.
Q. For whom?
A. Principally, or, I might say, exclusively, for corporations. For the B. & O. Railroad Company for about twenty-seven years; and then I was in charge of a property—another railroad—myself; and I controlled the accounting in that for thirteen years.
Q. I want to know if you made an examination of the books of the Newark Natural Gas and Fuel Company at Newark and Pittsburgh and Columbus?
A. I did at Newark, and at Pittsburgh, but there was nothing at Columbus to examine except the records of the proceedings of the directors and stockholders.
Q. When was that examination made?
A. I think it began in February, 1912, and continued, at intervals, until along in May. And then again, about two weeks ago. I spent, I think, three days at Pittsburgh again looking up some additional matter.

586 Q. Mr. Sutor, you investigated the books of the company as to its dividends, did you not, or did you?
A. I did, yes, sir.
Q. During the time of its operation? From the start to the present time? From the time it was organized to the present time?
A. Yes, sir.
Q. I will ask you whether or not, from the time of the organization of the company, to the time that the Logan management took

charge of it, any dividends were paid, if you know, and what they were, if any?

A. I know that they were paid.

Q. Have you any memoranda, taken from the books of the company?

A. Yes, sir, I have.

Q. State, from your memoranda, what the books show in regard to the dividends between 1889 and 1898.

A. I gave you a statement—I don't know just where to look for that particular item——

The Court: Do you refer to the Newark Company?

By Mr. Bolton: Yes, sir, to the Newark Company.

A. The first dividend was declared March 28, 1892, $4,080. The next dividend was March 23, 1893, 10%, $8,160. October 3, 1894, 11%, $8,976. April 1, 1895, 11%, $8,976; April 19, 1897, 3%, $2,448.

By J. R. Fitzgibbon: Was there anything in 1896?

A. No, sir.

By J. R. Fitzgibbon: How much was it in 1897?

587 A. $2,448. And on May 4, 1898, there was 11% dividend, which was taken by T. N. Barnsdahl, for $8,976. It was paid to him.

Q. Who was the owner of the stock at the time that dividend was paid?

A. The last one?

Q. Yes, sir.

A. I think Mr. Barnsdahl owned it all with the exception of a few shares. I couldn't say without referring to the list of stockholders.

Q. How many shares were outstanding?

A. 816.

By Mr. Bolton: Do you admit that he was the owner of it?

By J. R. Fitzgibbon: If he says that the books show that Barnsdahl was the owner of practically all of the stock—I think at that time that Barnsdahl held that stock himself, as trustee for some other people.

By Edward Kibler: Well, let us have the facts.

The Court: Well, get it in the record—get the record right.

(The witness figures.)

A. I don't know whether this is positively accurate or not. The stock was transferred to him; it was transferred to himself, making different combinations of certificates. It appears that he owned 582½ shares. That is as many as I can make that he held—582½.

Q. Did you make any examination of the books of the Newark Natural Gas and Fuel Company from February, 1898, to June, 1902?

A. Yes, sir.

Q. At the time that the Logan Company had the man-

588 agement of the Newark Natural Gas and Fuel Company?

A. Yes, sir. That is, of the books at Newark.

Q. Yes, sir.

—. Yes, sir, at Newark.

Q. State what the gross receipts of the company were during those years—during the time that I mentioned?

A. The total receipts were $503,536.75.

Q. What were the expenses during that time?

A. $107,529.13. There were some other expenses which are not relevant to the Newark plant itself. Do you want those?

Q. Well, what are they? What is the amount of them?

A. They aggregate $131,498.08.

By J. R. Fitzgibbon: How much?

A. $131,498.08.

Q. What is the nature of those expenses?

A. There was a six-inch line to Mt. Vernon, $3,616.73. A three-inch line to Granville, $427.21. An eight-inch line to Sugar Grove, $4,539.39. That makes an aggregate of those three items of $8,583.33. June 30, 1900, I found a journal entry crediting the Logan Natural Gas and Fuel Company and charging the following accounts: Supplies, $7,686.72; rentals, $6,141.50.

By J. R. Fitzgibbon: How much is the rental?

A. $6,141.50. A meter account, $911; Sugar Grove line, $114,317.03. And that makes an aggregate of that journal entry of $129,056.25. The rentals had been included in the statement to the amount of $6,141.50, and I deducted that, leaving a net charge of $122,914.75.

Q. Why was that deduction made?

A. I don't recall now why.

589 Q. What were the gross expenses during that time as they appear upon the books?

A. Including the first items that I gave?

Q. Yes, sir; including the first items that you gave, and the last items.

A. The gross would be $239,027.21.

By J. R. Fitzgibbon: How much is that.

A. $239,027.21.

Q. What were the net profits from the operations during that time, Mr. Sutor?

A. Well, they apparently were $264,509.54.

Q. How much capital stock was issued by the company in the beginning?

A. $81,600.

Q. Has any other issue ever been made of stock by the company?

A. No, sir.

Q. Did you make an examination of the earnings of the Newark Natural Gas and Fuel Company other than the earnings from gas?

A. Yes, sir.

Q. Have you a statement showing what your examination disclosed?

A. This is from 1902 to 1911.

Q. The revenue independent of gas?

A. Yes, sir.

Q. I will ask you to state what the revenue of the Newark Natural

Gas and Fuel Company from 1902 to 1911, inclusive, was for meter surrenders, and meter rentals.

A. There were two rates at that time—25¢ and 10¢.

Q. Well, I want the meter rentals?

A. $43,019.35.

Q. I will ask you to state what the miscellaneous items of receipts were, independent of gas.

A. Other than meters?

Q. Yes, sir—the miscellaneous items.

A. There were security deposits——

590 Q. (Interrupting.) Well, under the head of "miscellaneous items"?

A. $21.25.

A. I will ask you what the miscellaneous items of revenue were independent of the earnings from gas, under the head of bad debts?

A. $789.60.

Q. What was the amount of the revenue, independent of gas, under the head of "turning on"?

A. $53.10.

Q. What was the item of revenue, independent of gas, under the head of "unclaimed interest"?

A. $13.49.

Q. What was the item of revenue other than gas, under the head of "unclaimed deposits"?

A. $100.57.

Q. What was the item of revenue independent of gas, under the head of "G. A. R. refunder"?

A. $15.

Q. What was the item of revenue, independent of gas, under the head of "shop," during those years?

A. $3,477.03.

Q. Did you make an examination of the books of the receiver appointed by this court in this case to take the excess charges of gas collections?

A. I did.

Q. I will ask you what the amount of the collection was in the year 1911.

A. Do you mean the aggregate for the seven months?

Q. Yes, sir—the aggregate for the seven months.

A. $13,206.83.

Q. Mr. Sutor, I will ask you whether or not the Newark Natural Gas and Fuel Company, from the time of its organization in 1889, up until the time of the purchase of the plant by the Logan Natural Gas and Fuel Company in 1898—whether they ever kept an investment account?

A. I did not discover any. They had an account under the name of "plant," and such things as that. I don't recollect the titles; but there was no investment account.

591 Q. Was there anything under the head of "investment account"?

A. Not under that title, no, sir.

Q. From the examination that you made, from 1889, to 1911, I will ask you whether you found any record of any payments made to this company in the way of a loan, or investment, other than those obtained from the revenues of the company?

By J. R. Fitzgibbon: I object.
The Court: He may answer.
By J. R. Fitzgibbon: Note an exception.

A. There were some journal entries that indicated that some money was advanced. That was all.
Q. How much?
A. I am in the same fix about hunting that that I was in regard to the others; I hardly know where to look for it. There was an entry made June 30, 1900, charging supplies with $7,786.72; rentals, $6,141.50; that is the one that was referred to awhile ago; sundry bills on meter accounts, $911; and Sugar Grove gas line, for pipe, labor and construction and expenditures, Sugar Grove to Newark, $114,317.03. That was in favor of the Logan Company, $129,156.25.
Q. That is the item that you took into consideration in making your estimate of the earnings of the Newark Natural Gas and Fuel Company, under the Logan management—those are the same items?
A. I won't give a positive answer until I am sure that I am right. (Witness examines paper.) Yes, sir, the same thing.
592 Q. Do you find any place in the record that any additional capital was ever used other than obtained from the revenues of the company?
A. Not unless this is one. I didn't find any instance in which any money was paid into the company at all unless this would be construed as a loan. There was an entry on the 2nd of July, in which there were a number of sundries on both sides. It reads: Capital account: $101,024.
By Edward Kibler: What is that?
A. Capital account.
Q. What date is that?
A. July 2, 1900. Fuel gas collections, $208,173.99; illuminating gas collections, $3,945.40. Meter rentals, $51.25; Logan Natural Gas and Fuel Company, $8,142.01; that amounts to $321,336.65.
By Edward Kibler: What is the total?
A. It is $321,336.65. The other side of the journal entry read: Investment account, $125,000; Sugar Grove line, $114,317.03. City line construction, $33,374.25; line maintenance and repairs, $2,259.72; gas fitting and plumbing, $8,597.44; rentals and royalties, $6,970.45; general expenses, $13,484.49; office expenses, $5,758.20; meter account, $1,502.22; interest account, $164.50; cash, $9,619.14; M. M. Gillett, $289.21; that should foot just the same as the other.

By J. R. Fitzgibbon:
Q. It should foot, $321,336.65.
A. Yes, sir.
Q. Who owns the stock of the Newark Natural Gas and Fuel Company?

593 By J. R. Fitzgibbon: If he knows.

By Mr. Bolton: As shown by the books of the Newark Natural Gas and Fuel Company.

The Court: When do you mean?

By Mr. Bolton: In 1911—when you made your examination—who owned it then?

A. My information was obtained from the books at Pittsburgh. There were five single shares held by individuals, and 811 shares by the Colonial Trust Company of Pittsburgh.

Q. Who held the individual shares?

A. P. W. Lupher—now, I will have to make an explanation of that. In declaring the dividend in 1911, the vouchers did not designate the directors, but the designation that was made at the first dividend did designate them. P. W. Lupher, J. C. McDowell; E. P. Whitcomb; Hugh P. Brawley, and Lawrence T. Neal.

Q. When was the dividends declared in 1904, Mr. Sutor?

A. At a meeting of the company's directors held at Columbus, October 4, 1904.

Q. Did you make a copy of the voucher for that dividend?

A. No, sir,—yes, I did. It is voucher J-24 in the Pittsburgh office in 1904.

Q. Have you a copy of it?

A. Yes, sir.

Q. Will you please read it?

A. (He reads:) At a meeting of the company's directors, held at Columbus, Ohio, on October 4, 1904, a dividend of 220
594 30/51% was declared out of the net earnings for 27 months, from June 1, 1902, to September 30, 1904, both inclusive.

| | |
|---|---|
| Capital, 816 shares | $81,600.00 |
| 220 30/51% on same | $180,000. |

The Colonial Trust Company, P. W. Lupher, J. C. McDowell, E. P. Whitcomb, Hugh P. Brawley, and Lawrence T. Neal, each subscribed an order to E. P. Whitcomb, treasurer. The Newark Natural Gas and Fuel Company.

You will please pay to the Union Natural Gas Corporation, on October 1, 1904, 220 30/51% dividend on all stock standing in my name of the Newark Natural Gas and Fuel Company, out of the earnings of the above named company from June 1, 1902 to August 31, 1904.

Q. When was the dividend paid in 1909?

A. That is voucher B-17.

Q. Have you a copy of that voucher?

A. Yes, sir.

Q. Will you please read it?

A. (He reads:) By a resolution of the board of directors, copy of which is hereto attached, a dividend of 250% on the capital stock of $81,600 has been declared out of the surplus as shown below.

| | |
|---|---|
| Balance of surplus, as of December 31, 1906 | $89.138.39 |
| Balance of surplus, as of December 31, 1907 | $69,273.54 |
| Balance of surplus, as of 1907, 1908 | $51,560.38 |
| | $209,972.31 |
| Less dividend, 250% | $204,000.00 |
| Balance | $5,972.31 |

Q. Have you a copy of the voucher in 1911?
A. Yes, sir.

595 The Court: We will take a few minutes intermission now.

(Here the court took a recess.)

(After the expiration of the recess.)

J. HOPE SUTOR.

Direct examination (resumed).

By Mr. Bolton:

Q. Will you kindly read the voucher paid in 1911.
A. It is voucher M-241,911.
At a board meeting held December 19, 1911, the directors declared a dividend of $600,000 out of the earnings and surplus shown on attached statement. We have been carrying a surplus as property contingent, pending such action, and are hereby transferring the same to the regular surplus account.
Q. Is that all that there was to that statement?
A. Well, there was a statement of the assets and liabilities. Do you want that?
Q. Well, I believe not. I believe that is all.

J. HOPE SUTOR.

Cross-examination.

Examined by J. R. Fitzgibbon:

Q. Now, Mr. Sutor, the books of the Newark Company show that it was organized sometime in the year 1889?
A. Yes, sir.
Q. And it continued under the same management until about the year 1898?
A. Yes, sir.
596 Q. Then it changed management and was under another management from about 1898 until 1902?
A. Yes, sir.
Q. And then, from 1902, up to the present time, it has been under the present management that it is today?
A. Yes, sir.
Q. Do the books show—the original Newark Company—what

the investment of that Company was in the year 1889, when it began business? If you have a statement of the assets and liabilities of the company at that time I wish you would furnish them to us.

A. I do not know, but I have a good deal here. You want 1889, do you, Mr. Fitzgibbon?

Q. Yes, sir. That is, the investment, as shown on the books of the company, in that year.

A. Well, that is what I understood you to mean. It appears, from this memorandum—this is transcribed from the Newark books—that the operations began about March, 1889. I have it marked here: March, 1889, and December, 1889. On account of pipe line, $43,493,34. You only want it for that year, do you?

Q. The trial balance for that year.

A. They haven't anything like that.

Q. Do you mean to say that they had no trial balance at all showing the condition of the business?

A. No, sir, nothing of that kind.

Q. Well, what have you, showing the investment in 1889?

A. Well, that is the only thing that I have.

Q. Just laying the pipe line—$43,000.

A. Well, wait until I look at the balance of these papers and I will see whether there is anything other than that. (The
597 witness examines papers.) Would you call the office furniture and such as that an investment?

Q. Well, what would you say it is?

A. Well, you are asking me the question.

Q. Well, what did the books of the company show when this company began business in 1889—what did they show was the amount of the investment? That is, what was the investment shown on the books of the company at that time?

A. Of course, the office furniture is, in a sense, an investment. It was necessary to have. The reason that I asked that is because I can give the amount that they expended for office furniture in 1889, and that is all that I can give you.

Q. How much is that?

A. $241.81. I have not tabulated any of this, Mr. Fitzgibbon.

Q. Did they have any account receivable in that year?

A. Well, wait until I look these other papers over.

(The witness examines papers.)

Q. Were these books kept very accurately and very completely?

A. Some of the time they were kept admirably—by a lady who you all know. I think her name was Lynch. But she did not keep them all the time. I think that is her name. In 1889 there was an expenditure for tools, of $587.58. For "service box", the same year, $295.86. During 1889, there were four wells—no—that is not right. They were not sunk in the order that they are given here. (The witness examines papers.) There were two wells in 1889, at a cost of $5,945.25. That is all I have for that year.

Q. Were there any accounts receivable that year?

A. No, sir.

598 Q. Were there any accounts payable?

A. I have everything here that appears on their books.

Q. Was there any capital stock?

A. Yes, sir. But there was no record of it.

Q. There was no record of that?

A. There might have been a record somewhere, but I had all the transactions of the board of directors, and that is all I wanted as far as the corporate history was concerned.

Q. How much gas was sold during that year and how much was received for it?

A. I don't know as there was any sold in 1899.

Q. Well, do the books show whether or not there was any sold?

A. I think not, because I haven't any record of it.

Q. Do the books show how many customers they had at that time?

A. The books did not show at any time how many customers they had—any records that I saw. The books are very incomplete, Mr. Fitzgibbon.

Q. You haven't tabulated the investment that was shown on the company's books in March, 1889?

A. No, sir.

Q. It just consists of the items that you have mentioned?

A. Yes, sir, I just took the transcripts, and I haven't had any occasion to use them.

Q. Now, in 1890, what investments were made—that is, additional investments?

A. There appears to have been only one well in 1890; that was drilled in between May and October—well, that was not a well. It cost $567.57. I don't suppose that was a well.

Q. That was not a well?

A. No, sir.

Q. Did you look to see what that expense was of $567.57?

A. No, sir. Office furniture in 1890, $1.50. I suppose

599 you ought to count that as an expense rather than an investment.

Q. Well, they probably bought a chair.

A. It might have been, or a cuspidor. I don't think that ought to go as an investment, because I don't think it is likely that it was.

Q. I don't think that ought to settle the result of this lawsuit.

A. No, sir, I don't think it will. Now, we have tools, in 1890, amounting to $96.85; and "service box," $91.87; gas well tools, $4,351.02. There was a credit that year which reduced the expenditures of the preceding year to $43,202.34. That was a deduction.

Q. A deduction of about $200.

A. Yes, sir, $291.

Q. What did that deduction represent?

A. I don't know. It was on the pipe line. That is just as it appears on the ledger.

Q. Now, did they drill any wells in that year?
A. I gave you that first item.
Q. You gave $587.
A. $567.57. In 1890, it was not a well—$567.57.
Q. Well, I am asking whether a well was drilled in 1890, or whether there was more than one well?
A. Can you tell me where the Kokensparg well was? I have a memorandum of five wells here. I find this memorandum—no, that is in 1898. There isn't anything in 1890 but that one expenditure of $567.57.
Q. You have not tabulated the amount of the additional investment in that year?
A. No, sir, I have not tabulated anything.
Q. What was the amount of gas sold that year?
A. I don't know.
600 Q. Does it show?
A. No, sir, it doesn't show.
Q. Or what amount received from gas during that year?
A. No sir.
Q. Were there any other accounts—either bills receivable or bills payable that year?
A. There were some expense accounts.
Q. What were the expense accounts?
A. From April to December, 1889, freight and express, $538.03. It is possible that that ought to be in the investment account. It might have been freight and express upon the pipe that they were getting in. I cannot tell anything about that. And they have just simply: Expenses from April to December, 1889, $1573.
Q. Did you itemize the expenses?
A. I am giving the years.
Q. Do you remember what that expense consisted of—whether it was office salary or wages or what?
A. I couldn't answer that question. I might have known at the time, but it is too long ago.
Q. Let us go to the year 1891. What investment was shown by the books in that year?
A. There were four wells at a cost of $19,262.51.
Q. That is, in 1891?
A. Yes, sir.
Q. $19,262.51?
A. Yes, sir.
Q. What other investments were there?
A. There was real estate, $26.08.
Q. $26.08?
A. Yes, sir, $26.08. The office furniture was only $6.00 that year. And tools, $106.06. "Service box," $113.62. Gas well tools $2,656.09. Pipe line, $5,487.97. Freight and express, $383.23; office furniture $6; expenses $13,611.44.
601 Q. Thirteen thousand and what?
A. $13,611.44.

Q. You wouldn't count the sum charged there as expenses, as investment, would you?

A. It was under the head of "expenses", and I took it just as it was.

Q. The wells, and the tools, and "service box" and gas well tools and pipe line, and freight and express.

A. Yes, sir. The other was marked "expenses;" I don't know whether expenses of construction or maintenance or operation.

Q. How much gas was sold that year?

A. I have no record of that.

Q. Or, the amount received for gas?

A. No, sir.

Q. Let us take up the year 1892. What do the books show was the investment in that year?

A. There was only one well—$1834.07.

Q. What were the other investment features in that year?

A. Tools, $106.06. This is 1891 that we are talking about?

Q. No, sir, 1892. We finished 1891.

A. That is what I thought. $1834.07 is right.

Q. What were the other investment features in that year?

A. Tools, $57.08.

By Edward Kibler: Was that well in 1892?

A. Yes, sir.

By Edward Kibler: How much?

A. $1834.07. "Service box" $22.07. Gas well tools, $2048.01.

By Edward Kibler: Those are gas tools?

602 A. Yes, sir. Real estate in 1892, $255.15. Pipe line, $952.77. Freight and express, $205.06. The other two items are probably expenses: Office furniture, $17.08. Expenses, $5836.59.

Q. Do you know what they consist of?

A. No, sir.

Q. What was the amount of gas sold that year?

A. I don't know.

Q. What was the amount received for gas?

A. I don't know.

Q. Was there anything to indicate whether that well which was drilled was a dry hole or a producing well?

A. No, sir, except that I found a list in one of the books showing the active wells. Here is the memorandum that I made; 24 wells were drilled by the original Everett Company; and July 1, 1895, 11 are recorded as abandoned. This well that I have given you was markd "abandoned."

Q. In 1895?

A. Yes, sir, I don't know whether it was a dry well originally or not.

Q. In 1893, what does the investment show in that year?

A. No wells. Tools $19.72; "service box" $45.32; gas well tools $1451.05. In 1893, real estate $11.44; pipe line $500.10. Freight and express, $161.96. In 1893, real estate rent—there is a receipt for $53.50, real estate rent.

Q. You don't know what that was for, do you?

A. No, sir.

Q. You don't know what that represented?

A. No, sir, but I imagine it was from the Kuster property, on Locust street—well, it couldn't have been, either, because that was bought in 1896. And this is in 1893. I don't know what that was.

Real estate rent, $53.50.

603 Q. Do the books show any royalties paid for any wells?

A. No, sir.

Q. Or, any rental on leases?

A. I didn't find anything of that kind.

Q. In 1893, did they show any gas sold?

A. I don't know what became of the books, but the only books that I got showed what I am giving you.

Q. Do they show any expenses for rights of way, or anything like that?

A. No, sir.

Q. Now, in 1894.

A. Well, have you taken the office furniture and expenses in 1893?

Q. No, sir.

A. Do you want those?

Q. Yes, sir.

A. Office furniture, $7.20; and expenses $3679.27.

Q. Was that office expenses, or do you know how they designated that?

A. It was just marked "expenses."

Q. What was the investment account in 1894?

A. There was one well $2287.11. Tools $21.94; "service box" $35; gas well tools $740.02; real estate $352.06. Pipe line $1437.82. Freight and express, $94.32. I have, in the same year, real estate rent, $10. No office furniture in 1904. In 1894, the expenses, $1,-792.06. That is all I have got.

Q. Now, did these books show any royalties paid for wells?

A. Not that I discovered.

Q. Or, rentals for leases?

A. No, sir.

Q. Or, any rights of way secured?

A. No, sir.

Q. Or, any collections for gas?

A. If there were any such records there, they were not given to me. I don't say that they were withheld; I say they were not there.

Q. The books did not show it?

A. No, sir.

604 Q. Did the books show the capital stock of the company?

A. No, sir.

Q. In 1895, I wish you would give the investment as shown in that year.

A. There were ten wells in 1895 at a cost of $41,619.87.

Q. What were the other investments for that year?

A. Tools $47.89; the "service" box disappears at this time; It was closed into pipe line supplies; gas well tools $1138.64. Real estate $4.12. Pipe line $4595.74. Freight and express $168.08.

Q. What was the last?
A. Freight and express.
Q. How much?
A. $168.08.
By Edward Kibler: $168.08?
A. Yes, sir. And rent from real estate that was $30. There was nothing for office furniture. The expenses were $2399.84. Now, in 1896, there were two wells—$5,460.16.
By Edward Kibler: They were pretty cheap wells.
A. Tools $236.36. Gas well tools $1551.52. Real estate $152.10. Pipe line $18,338.05. Freight and express $300.40. Now, the rent from real estate in that year was $307.50. You will see, by looking at 1894 and 1895—the tenant must have been delinquent and must have paid up. Office furniture $5.21. Expenses $2667.52.
Q. Do you say that in 1895 the books showed that up until that time 24 wells had been drilled and 10 or 11 of them had been abandoned?
A. 24 wells are enumerated as having been drilled, and July 1, 1895, eleven are recorded as abandoned.
605 Q. July 1, 1895?
A. Yes, sir, 1895.
Q. You have only accounted here for about 19 wells, counting the wells which were drilled in 1895.
—. I have the list showing what they were.
Q. You said that in 1895 the books of the Company showed that, including that year, there had been 24 wells drilled 12 of which had been abandoned?
A. Eleven.
Q. Eleven?
A. Yes, sir.
Q. You have only accounted for 19 wells, which would leave a discrepancy of 5 wells to be accounted for.
A. Well, there are 24 enumerated here. I took the memorandum as it was on the book there, and I think there are 24.
Q. This means, up until 1895.
A. Well, I have given you in 1896.
Q. Well, your statement was predicated upon what appeared on the books in 1895.
A. Just a moment. (The witness figures.) There are two No. 9's. That makes 24 wells.
Q. Your statement was that to 1895 the books showed 24 wells drilled, including the wells drilled that year.
A. It says to July 1st. I didn't check it to see whether that statement was right or not, but I copied it.
Q. Well, what do the books show as to the number drilled up until July 1, 1895?
A. They show 20.
Q. To 1895?
A. To July 1, 1895. Let me give them by years.
Q. All right.
A. I will see whether I have missed any. Two in 1889; 1 in 1890;

4 in 1891. 1 in 1892; nothing in 1893; in 1894, 1; I will
606 give it to July 1, 1895, and not beyond that. Ten up to July 1, 1895, and 2 after July 1st. Is that right?

By Mr. Fitzgibbon: Ten in the year 1895——

A. Well, that is wrong; that is not right. (The witness figures.) How many did I give you in 1895?

By Mr. Fitzgibbon: Well, ten.

A. Well, that is what I make it now.

Q. How many before July, 1895? Ten wells in that year, you said.

A. Well, but I divided it before and after July.

By Edward Kibler: You made it ten before and two after.

A. No, I didn't.

The Court: Yes, that is what you said.

A. Well, that is wrong; that is not right. (The witness fingres.) Yes, there were 12 in 1895. That is what there were.

By Edward Kibler: Do you want to change the cost?

A. No, the cost is all right. It is only in the number. Ten before and two after July is right.

Q. And that makes a grand total, in 1895, of 12 wells?

A. Do you mean, drilled in that year?

Q. Yes, sir.

A. Yes, sir, that is right. Now, does that check out right?

Q. No——

A. Two in 1896 and one in 1897, and yet this statement speaks of—well, that would be all right, because the two in 1896 and
607 one in 1897 were not abandoned in 1895——

Q. Well, they couldn't have been abandoned; they were not drilled.

A. There are two columns—an abandoned, and an active column. This memorandum is all right. 24 wells are enumerated as having been drilled by the original, Everett, Newark Natural Gas and Fuel Company.

Q. I understood that they were drilled up to and including the year 1895.

A. Eleven are recorded as abandoned.

Q. Then the 24 wells were drilled in the entire time that the Everett Company managed the property.

A. Yes, sir.

Q. And there were two wells in 1896?

A. Yes, sir.

Q. You have given those, and you have given the cost of them.

A. I didn't in 1897, did I?

Q. In 1897, what does the investment show?

A. One well, $4330.01——

Q. How much?

A. $4330.01.

Q. What were the other investments?

A. Tools, $45.12; gas well tools $939.08; pipe line $3933.86. Freight and express $158.53. Rental, $144. Office furniture, $38.40. Expenses $2748.61.

Q. And in the year 1897 the books do not show any gas sold or anything of that sort?

A. No, sir.

Q. In 1898, what was the investment?

A. There appear to have been 5 wells drilled; Kokensparg, Price, Foster, Andrews and Taylor.

Q. There were 5 wells drilled that year?

608 A. Yes, sir. At an expense of $13,668.02. Tools $506.27; pipe line $18,704.55; freight and express $634.18; rent $12. Office furniture, $146.18. Expenses $2894.53.

Q. Do you know when those 5 wells were drilled in 1898?

A. Yes, sir. Kokensparg No. 1, was begun in April 1896, and was finished in Feb., 1898. Do you want the cost of each well?

Q. Well, do you mean that it was begun in 1896?

A. That is what the record says.

Q. And was finished in 1898?

A. Yes, sir.

Q. Does that indicate that it was abandoned in 1898, or completed?

A. Finished in 1898. The charges to it ran from April 1896 to February 1898.

Q. Now, those other wells—what period were they drilled?

A. The Price well in July, 1896, and it was finished in Feb. 1898. The Foster well No. 3, from July 1897, to January 1898. Andrews No. 4, from November 1897, to March 1898; and Taylor No. 5 from November 1897, to March 1898.

Q. Now, that pipe line expense of $18,704.55—when was that expense incurred? What part of the year?

A. I couldn't tell that. The pipe line is the amount that was on the book for that year. I just took the annual expenditure, and not by the month.

Q. Was there anything to indicate where that line was built to?

A. No, sir; I just took the amount; if there were any indications, I usually made a memorandum of them.

Q. Do you know what the investment of the old Newark Company was, as shown on the books of the company, from 1889 up until 1898 when the control of it was transferred?

609 A. There was an entry made in December, 1899, in Journal D, Page 275, and posted in Ledger C, Page 203, in which the "plant" was charged with $38,121.45; and the old pipe line was credited with the same amount. Up to the time when the credit of thirty-eight thousand dollars was given to the account, it had aggregated $78,448.65.

By Edward Kibler: How much?

A. $78,448.65.

Q. That did not include the wells drilled?

A. No, sir.

Q. Or, the pipe line?

A. That was the pipe line.

Q. That was the pipe line?

A. That was simply the pipe line.

Q. The pipe line alone was something like $78,000 up to that time?

A. Up to the close of 1897.
Q. To 1897?
A. Up to the close of 1897.
Q. What did the field investment show? Including those 5 wells in 1898.
A. That would mix things. I can give that afterwards, can't I?
Q. Yes, sir.
A. The well account for the 24 wells closed in 1897, and it was $44,611.07.
Q. Was that supposed to include all of the wells that were drilled up to 1897?
A. Well, wait a minute. Maybe I am off on this. (The witness figures.) I will change the answer that I gave about the $44,611.07. Those were the active wells at the time.
Q. I want to know what the field investment was.
A. Thirteen wells were active. Now, the abandoned wells cost, in addition to that, $36,695.48.

Q. Do you know what the other investment, as repre-
610 sented on the books, aggregated during that time?

A. Up to and including the end of 1898, do you mean?
Q. Yes, sir.
A. For freight and express, $3113.14—well, let me correct that. I find a memorandum here, at the bottom of this, in the Everett régimé, the expense was $2485.33, instead of $3113.14; there was $6.37 of that which belonged only to the Everett management; so that makes it, $2485.33.
Q. That is the express?
A. That is the freight and express. Instead of using the $3113.14, use that.
Q. $2485,33.
A. Yes, sir, $2485.33.
By Edward Kibler: Is it $2485.33?
A. Yes, sir. I can give you a memorandum, Mr. Fitzgibbon, which will cover that.
Q. Well, that is what I would like to have.
A. (Reading from memorandum.) The records of the original (Everett) Newark Natural Gas & Fuel Company are vague, and the revenue is covered in "cash" which was not taken. (It was just a cash account; it ran right along, and I couldn't tell anything about it.) The following are the principal items of disbursement to the date the Logan interest took charge:
Pipe line, $78,448.65; gas well tools, $14,875.43; expenses, $41,-526.74; freight and express, $2485.33; tools, $1218.60; office furniture, $317.29; service boxes, $604.37; bad accounts, $250.60.
That makes an aggregate of $139,727.01. Now, I have real estate $3883.95——
Q. (Interrupting.) Wait a minute. You say amounts to how much?

A. $139,727.01. That did not include the cost of the
611 wells—the active as well as the abandoned wells; because those two items, together with the pipe line, alone amount

to $148,000—or, $158,000 rather. If you will add the total of the active and abandoned wells, you will get that.

Q. That statement that you have there is to the beginning of the year 1898? And does not include the five wells drilled at a cost of $13,668.02, does it?

A. Which statement do you mean? The one that I just read to you?

Q. The statement that you have just given to us; pipe line $78,448.65; producing wells $44,611.07; abandoned wells $36,695.48; freight and express $2485.33; gas well tools $14,875.43——

By Edward Kibler: You have forty-one thousand dollars of expenses.

By Mr. Fitzgibbon: Not in this.

The Witness: Yes, sir, the expenses are in that.

Q. The pipe lines were $78,448.65.

A. Yes, sir.

Q. Wells, eighty-one thousand dollars. Up to the 1st of January, 1898.

A. That is about right.

Q. Gas well tools $14,875.

A. Yes, sir.

Q. Freight and express, $2485?

A. Yes, sir.

Q. Office furniture, $317.29.

A. Yes, sir.

Q. Service boxes, $604.37.

A. Yes, sir.

Q. Tools, how much?

A. $1218.60.

Q. $1218.60?

A. Yes, sir.

Q. Those items that you have mentioned give the invest-
612 ment of the Everett Company up until the beginning of the year 1898.

A. 1899.

Q. No, 1898.

A. Yes, sir, 1898.

Q. And there must be added $13,668.02, wells begun by the Everett Company before the transfer to Mr. Barnsdahl in February, 1898.

A. Well, I don't know about the time when he took it.

Q. Well, the franchise was passed in Feb., 1898.

A. Well, I think it was in 1898.

Q. We are assuming that it was soon after the passage of that ordinance.

A. But in that item there are $41,000 of expenses.

Q. $41,000 of expenses?

A. Yes, sir, $41,526.74.

Q. Now, I wish you would verify these figures, Mr. Sutor?

A. All right.

Q. According to our figures, in February, 1908, at the time when

this transfer was made, Mr. Everett, had expended in investments in the field and pipe line $193,174, which does not include $18,704.55 pipe line constructed in the year 1898. Is that correct?

A. I haven't made any such figures as those.

Q. And which does not include any royalties, rentals, rights of way, or anything of that sort.

A. No, sir, it doesn't include those.

(The witness figures.)

A. What do you make the total?

Q. That does not include the pipe line in 1898—$193,174. I have a grand total of $193,721; and take $41,521 from that and that leaves $98,200.

—. Yes, sir.

613 Q. To that must be added the wells, active and abandoned, amounting to $81,306.

A. Yes, sir, that is right.

Q. And that makes $179,506.

A. Yes, sir.

Q. And adding $13,668 to that, makes a grand total of $193,174.

(The witness figures.)

A. I want to see whether I agree with you. How much do you make it?

Q. $193,174.

A. Yes, sir, and eighty-four cents.

Q. And that represented the actual field investment of the Everett Company at that time.

A. Yes, sir.

Q. Except whatever was paid out for royalties, leaseholds, lease rentals and rights of way. That was doubtless covered in the expense account, wasn't it?

A. I don't know; I didn't analyze it to see that it was.

Q. Well, you know that they are expenses incident to the gas business.

A. Yes, sir.

Q. And you don't find anywhere on the books provisions for the payment of those items?

A. No, sir.

Q. If they were not paid out of the expense account, they would either be a charge against the Company, or they were not paid at all.

A. Yes, sir. You left out "real estate." There is one item of "real estate" that you haven't got. Go back to your memorandum of 1896.

Q. All right.

A. Did I give you any real estate that *that* year?

By Mr. Drolet: Yes, sir, $152.10.

A. How much?

By Edward Kibler: $152.10.

614 A. In 1896?

By Mr. Fitzgibbon: Yes, sir, in 1896.

A. In April, 1896, the Kuster proporty was purchased, at Locust and First streets.

Q. The Kuster property?

A. Yes, sir. The Logan Company never gave me a cent for finding that for them. I found it for them, but they never said a word about it.

Q. Well, will you try and make it up after court adjourns?

A. They paid $3083 for it.

Q. Now, I wish you would state what the books show the investment was in 1899. Do you know whether or not the item for pipe line, of $18,704, or any part of it should be charged against the Everett Company?

A. No, sir, I think not. When the Logan Company took it over, they opened some new accounts. They did it to simplify the system or lack of system of the Everett people. I am not criticising them at all, but they opened up their accounts to make them more intelligent, and they included that $18704.55. In 1899 they opened their account of "Plant." In 1899, they took out the 1898 and 1899 "expense" and opened their own account of "Plant," and for that reason I am satisfied that they accepted it as a proper charge to themselves.

Q. What does 1899 show in the way of investment?

A. There was an expenditure of $19,416.90. It was on account of pipe line, but it was afterwards changed by the Logan Company to "Plant."

Q. And does that not include the eighteen thousand dollar item?

A. No, sir.

615 Q. What are the other items?

A. Freight and express to July 1st, $503.34—I will correct that; it was $1131.15, instead of $503.34. Tools $132.39. Office furniture, in 1899, $278.70. It might be well to say right there that in 1900, on June 30th, they made an entry—the Logan Company—the aggregate up to that time was about $600 for office furniture; but on June 30th, 1900, they closed that account by making office expenses; and so you are getting too much into the investment. You have already $463.47; you don't want to put that $278.70 altogether in that. Now, let me give you the difference. (He figures.) You don't want to put 1898 in there either——

Q. Just give us the amount.

A. In 1899, there was $278.70, which ought not to be in there in that amount. Expenses in 1899, $2075.21. That is all in 1899.

Q. Did the books show any wells drilled in 1899?

A. No, sir.

Q. Or, any gas purchased?

A. No, sir. They did show, however, that in 1899, the company disposed of $97,929 worth of gas,—fuel gas, and $1851 illuminating gas.

Q. That must be the Logan Company, and not the Everett.

A. These are all the Everett papers that I have here. I couldn't answer about the Logan Company now. I will look in a moment.

These are only Everett papers that I am reading from now, and I couldn't answer your question now.

Q. You have already given the year 1889—the pipe line investment, of $19,416.90.

A. It was in the ledger, but in 1899 they corrected it by
616 opening a new account. When the correction occurred, I made a memorandum of the fact. What is your question now?

Q. In 1899, do the books of the Newark Company show what amount was paid for gas? Or, for drilling for gas or operating expenses?

By Mr. Roderic Jones: I object for this reason: If they wanted this evidence, they should have produced it. They have gone on now with this for about an hour and a half——

The Court: You may proceed.

The Witness: What year is that?

Q. In 1899, or, rather, say in the year 1898. From February on, in the year 1898.

A. There was a division in 1898, March 9th. I presume that is when the Logan Natural Gas and Fuel Company began, or when they took charge. You are speaking now about what the Logan Company got?

Q. No, I am asking what the Newark Company paid for gas from March, 1898, either for wells drilled or for gas purchased?

A. I don't find anything about their having purchased anything.

Q. Well, do you find where they drilled any wells?

A. No, sir.

Q. Or, had any field investment in 1898?

A. No, sir.

Q. Well, do you find where they had any field investment in the year 1899? Other than $19,000 worth of pipe line, which you have mentioned.

617 (The witness examines papers.)

The Court: Well, let us get along.

A. I cannot find anything.

Q. No fuel investment at all in the year 1899?

A. No, sir.

Q. Can you find any items of gas purchased in that year?

A. No, sir, not of gas purchased. I find where there was gas sold.

Q. And that gas amounted to $97,929.

A. Fuel and illuminating gas; $97,929 fuel gas, and $1851.07 illuminating gas.

Q. And there was no field investment shown in that year at all?

A. I don't observe that on this paper, no, sir.

Q. Do the books show whether in 1898 or 1899 any pipe lines were constructed to Sugar Grove, for instance? And, if so, what was the charge for the investment?

A. I saw one paper here while I was looking them over that did mention something of that kind; but I don't see it now.

By Mr. Bolton: Mr. Fitzgibbon has the paper that you are looking for.

The Witness: Have you that paper?

By Mr. Fitzgibbon: I have this paper that I took some time ago. (Hands paper to the witness.)

A. I didn't answer a whole lot of this stuff that you asked me for because I didn't know where this paper was. I didn't know where it was.

618 Q. Do you have anything in 1898 or 1899 credited to field investment by way of pipe line construction?

A. No, sir, I haven't.

Q. Do you find anything about the investment in 1899, other than the pipe line of $19,416.90, which you have already testified to?

A. No, sir, I don't.

Q. Now, in 1900, what do you find in the way of field investment in that year?

A. There was a journal entry made on July 2, 1900, which indicates that there was some work of that kind done. The Sugar Grove line was $114,317.03.

Q. Did that indicate what that was for?

A. I think I gave you that earlier in the day. It is an entry made by the Logan people to adjust the affairs when they opened a new set of books.

Q. And that was to represent the Sugar Grove line?

A. Yes, sir.

Q. Does it state the size of the line?

A. The entry doesn't, no, sir.

Q. Now, does it show any other investment?

A. City line construction $33,374.24.

Q. Is there any other?

A. Gas fitting and plumbing; I don't know whether that is construction, or maintenance, or operation or what. It is just simply gas fitting and plumbing.

Q. Would you call that an investment? If you would, just give it to us.

A. I couldn't answer that question.

Q. Well, do you know the amount of it?

A. For the gas fitting and plumbing?

Q. Yes, sir.

A. It is $8597.44.

619 Q. Do the books show any other or additional investment in the year 1900?

A. Would you call rentals and royalties an expense or an investment? There was $6970.45 of that.

By Edward Kibler: How much?

A. There was $6970.45.

By Edward Kibler: What do you call that?

A. Rentals and royalties.

Q. Well, anything else?

A. There is a meter account. I cannot say whether that was for repairs, or maintenance, or what.

Q. This is in 1900?
A. Yes, sir. The entry of July 2nd.
Q. What was the amount?
A. $1502.22.
By Edward Kibler: How many cents?
A. 22 cents.
Q. What other investment was there during that year?
A. There doesn't appear to have been any other investment.
Q. There were no other investments in 1900?
A. Well, this entry is the only thing that I have referred to. That amount I gave of the Sugar Grove—$114,317.03. I find another memorandum that an entry was placed in the journal on June 30th, charging the Sugar Grove line with $114,317.03.
Q. That is the pipe line?
A. Yes, sir. The entries are two days apart.
By Edward Kibler: You say that that was charged to the Sugar Grove line?
A. Yes, sir. That was charged to the construction of the
620 Sugar Grove line. There are no other construction items on this paper.
Q. Now, take the year 1901, and state what the field investment was in that year.
A. I find a memorandum that on Dec. 30, 1899, the "plant" account was opened, as I mentioned. During that year they, closed into that $660.96 from the tool account, and expended $2020.75; and in June they had $7430.91, which they charged to "supplies," and credited to the plant, reducing the investment, as of Dec. 30, 1909, to $33,374.25. There was so much changing about there that it is very difficult to keep it straight.
Q. You say that was when?
A. June 30, 1900.
Q. What about the investment in 1901?
A. Well, that isn't all in 1900. They added $2659 so that it made an aggregate investment as of December 31, 1900, of $36,133.39, for the city plant.
Q. I wish you would give those figures again. We have it thirty-three thousand.
A. You want to add to that $2659.14.
By Edward Kibler: To what account?
A. The city plant. Does that agree with yours?
By Mr. Fitzgibbon: Yes, sir, that is all right.
Q. Are there any changes to be made in the year 1900?
A. You are not alking about the operation, are you?
Q. No, sir, I am concerned now with "investment."
A. In 1900, from July to December, there was $1929.27.
621 Q. You gave us $6970.75.
A. Well, that was in that entry. That is the entry that they made as of July 2nd. In July, up to and including December, $1929.27.
By Edward Kibler: That is on what account?
A. Rentals and royalties.

Q. Are there any other additions to be made for 1900?

A. The expenditures considered by the Logan Company appear to be only the ones in Ledger C, which in 1900 amount to $828.95; and on July 30, $61.41—that was brought over and the Logan Company credited with the amount, and that was carried to the new ledger. You have to sit down and study it in order to get the straight of it. Meter rentals is the only thing that is left in these papers.

Q. In 1900?

A. Yes, sir.

Q. What do they amount to?

A. Here are some meters: Meters, in 1900, $2880.05—no, that oughtn't to be, because up to July it was $1107, and this entry must include that. It is $1502 in July, and you can only take $1773.05 which accrued after July.

Q. Are there any other items of investment?

A. That is all there appears to be in this paper.

Q. Now, taking 1901.

A. The Everett people had an account called "pumping," which they opened in April 1898; it ran along in connection with an account called "A.B.C. Fittings." I don't know what they were. I couldn't find out what that is. On June 30, they closed that up and opened a new account. That is a shortage—you don't want that?

Q. No, sir. I wish you would find out for me the field investment from 1898 up until 1902 when this property changed
622 management; I mean the entire investment; whether in the field or in the plant here in the city; also, how much in 1899, 1900, and 1901, and up until 1902, was paid by the Newark plant for gas; how much was expended by them during that time in drilling for gas; what their wells cost them and what their gas cost them during that time.

A. I would like to correct some of my testimony. Mr. Fitzgibbon took my paper and I couldn't answer the questions. I said that there weren't any records of gas sales, and he had the paper.

By Mr. Fitzgibbon: Well, there weren't any records of sales of gas during that time. That is correct. It began in 1898.

A. Well, I saw that you had my paper——

Q. Well, there wasn't any advantage to be taken. I will ask you to get that information, and if you will get that information, we will close the examination in a short time.

The Court: We will adjourn now until 9 o'clock tomorrow morning.

(Here court adjourned to 9 o'clock a. m.)

Morning Session, 9 O'clock a. m.

MR. SUTER.

Cross-examination (resumed).

Examined by J. R. Fitzgibbon:

Q. I understand, Mr. Suter, that since the adjournment last evening, you have discovered a memorandum of yours which shows the amount of receipts for gas sold by the Newark Company during the Everett management.

A. Yes, sir.

623 Q. That paper shows that from 1889 until 1898, the Everett Company sold $207,496.48 worth of natural gas, and $13,278.21 worth of illuminating gas, or a total of $220,774.69 worth of gas.

A. Yes, sir.

Q. That paper further shows that, during that time—from 1889 until 1898, this company dispersed, in round numbers, $282,000—or $282,591.44.

A. Those are not my figures. I would not want to say that that is correct until I would prove it.

Q. I thought you had that computed. I thought those were your figures.

A. I don't make that those figures. I make it $272,000.

By Edward Kibler: Instead of $282,000.

A. Yes, sir.

Q. I will read them off to you: $36,695.48; $44,611.07; $13,-668.02; $6,524.46; $78,448.65; $14,875.43; $604,37; $1218-60; $41,526.74; $317.29; $2485.33; $32,640.

A. Is that all?

Q. Yes, sir, that is all.

(The witness figures.)

A. I make it $273,615.41.

By Edward Kibler: What is that?

A. The total of the disbursements.

By Edward Kibler: Give that again.

A. $273,615.41.

Q. And of that amount $32640 was declared as dividends during those ten years.

A. Yes, sir.

Q. And that left the disbursements about $241,000 on field properties and plant, as compared with receipts of about $220,-000?

624 Q. You said yesterday that in 1898 this company had a field investment aggregating, in round numbers, $197,000.

A. The Logan Company?

Q. No, sir, the Newark Company.

A. I don't remember the figures.

Q. In 1898, they sold this property for $101,560, didn't they?

A. That is about it. I don't remember the exact figures. $101,000 I know is the amount in round numbers.

Q. And during that time the Newark Company was a distributing as well as a producing company.

A. Yes, sir.

Q. The last dividend that is marked here—in May 1898—was a dividend that was not paid out of any money arising from the sale of gas, but from the sale of property. Wasn't it?

A. It appears so.

Q. Now, beginning with 1898, at the time when Mr. Barnsdahl bought the Newark Company, the Logan Company advanced, between that time and 1900, for various construction work of the Newark Company, about $129,000.

A. Yes, sir.

Q. And that included the construction of a line to Sugar Grove, as well as rentals and royalties and other expenses?

A. Yes, sir.

Q. Did the books of the company show that the Logan Company received any interest, or was any interest charged to the Newark Company, for that amount?

A. I couldn't answer that. The books are so incomplete——

Q. So far as——

By Edward Kibler: Let him finish his answer.

625 A. The books are very incomplete. It was very difficult to get the information there, and I never studied them after I got them except to prepare that statement, and I let the matter pass out of my mind.

Q. So far as your investigation disclosed, there was no such charge to the Newark Company, was there?

A. I don't remember any.

Q. Now, you found certain items of expense charged the Newark Company for work done on the line to Mt. Vernon.

A. Yes, sir.

Q. And also the line to Granville.

A. Yes, sir.

Q. Do the books of the company show whether the Newark company constructed a line to Mt. Vernon; and if so, what was the cost of it?

A. I don't think it constructed it, because the amount was so insignificant. It shows the Mt. Vernon line $3616.17; and Grenville line $427.21. That is all the Newark books show it expended.

Q. The books of the company show that from 1898 until May, 1902, during which time Mr. Barnsdahl was managing the company, the company sold fuel and illuminating gas amounting, in round numbers, to about $494,000.

A. No, sir, $484,000.

Q. $484,000.

A. Yes, sir.

Q. The books further show that during that time this company

incurred expenses amounting to $107,529.13; in the way of general expenses.

A. You speak of the general expenses as a book account, or——

Q. (Interrupting.) As you gave it here yesterday. Those items here. (Indicating on paper.)

A. Including plant and line repairs?

626 Q. Yes, sir.

A. I have it divided.

Q. Well, that is the way you gave it yesterday—$107,529.13. What items make that $107,000?

Q. Plant and expenditures—you gave them yesterday—$36,-133.39.

A. There is another charge to supplies.

Q. The line maintenance $2382.89.

A. Yes, sir.

Q. Rentals and royalties $18,534.93; General expenses $25,-455.88; office expenses $13,105.83; meters $9142.27.

A. That is right.

Q. And according to these figures that you gave yesterday, that makes $107,529.13. So far as the books of the company show there isn't anything to indicate what that $484,000. worth of gas sold by the Newark Company—what it cost the Newark Company to produce it, if they did produce it, or what it cost them to buy it, if they had to buy it.

A. No, sir.

Q. And as far as the books show, this gas was absolutely a gift to the Newark Company?

A. I don't know about that. They owned the wells, and it may be that they have covered that expense in some of the other expenses, like general expenses—that was $25,000—I don't know anything about that.

Q. Well, the line maintenance of $2383.89 wouldn't drill very many wells, would it?

A. I don't think it would.

Q. Therefore, so far as disclosing what was the profit, if any, of the Newark Natural Gas & Fuel Company, during the years 1898 to 1902, unless this gas sold by them was absolutely a gift, these books are valueless.

By Mr. Roderic Jones: Well, who made them?

627 By Mr. Fitzgibbon: We are not responsible for that any more than you gentlemen——

The Court: Well, answer the question.

A. The only answer I can give is what the books show. You haven't included in the matters that you have mentioned some other expenses; the Sugar Grove line, for instance.

Q. Do you mean that $114,000?

A. A little more than that.

Q. $129,000?

A. No, that $129,000. was not altogether on the Sugar Grove line. There were some other accounts that went in that $129,000.

Q. How is that?

A. There were some other things furnished by the Logan Company in that $129,000. other than the Sugar Grove line.

Q. Yes; that amounted to $114,000.

A. Yes, sir.

Q. You had a statement last evening showing those amounts. $114,000, and some rentals and royalties, amounting to six or eight thousand dollars, and some other expenses, which aggregate $129,000.

(The witness gets paper.)

Q. Supplies, $7686.72?

A. Yes, sir, that is about right.

Q. Rentals, $6141.50?

A. Yes, sir.

Q. Meter account, $911.

A. Sugar Grove line, $114,317.03.

Q. That was advanced by the Logan Company to the Newark Company, and which was re-paid to the Logan Company in June sometime, as is shown by a journal entry.

628 A. Yes, sir. There was $8,000 of that which was not paid June 30, 1900. About $8,000. was paid later.

Q. Well, it was paid later?

A. Yes, sir, but not of that date.

Q. When it was testified yesterday that this Company received profits from gas amounting to $264,592.41, that was not profit at all unless the Newark Company got a gift of its gas, was it?

A. I am not able to say how they got it. I made the statement on the strength of those figures, was all.

Q. The books of the Newark Company do not show that they drilled any wells in 1899, do they?

A. No, sir, I think 1897 was the last, or 1898.

Q. Or, in 1898—with the exception of what was covered by the Everett Company.

A. Yes, sir.

Q. I mean, after Everett parted with his control.

A. No, sir.

Q. And the books do not show that they drilled any wells in 1900.

A. No, sir.

Q. Or, 1901.

A. No, sir.

Q. Or until 1902—up until the present parties got control.

A. No, sir.

Q. And they don't show any expenditure in the way of field lines to connect up any wells, if any wells were drilled during that time?

A. Do you mean outside of the City of Newark?

Q. Yes, sir.

A. No, sir, nothing outside of the City of Newark.

Q. I mean any field expense.

A. There were some expenditures made in the city.
Q. But, not outside of the city?
A. No, sir.
629 Q. Now, isn't it a fact that the books of this company, from 1898 until 1902, when the present people got control of it, are absolutely valueless as determining what profit, if any, was derived by the Newark Company from the sale of gas during that time?
A. I don't know whether they are absolutely valueless, but they are not determinative.
Q. Of anything.
A. No, sir, not of anything.
Q. In your investigation of the Newark books, and the Logan books in Pittsburgh, every courtesy was extended to you by the officers of the different companies?

By Edward Kibler: How is that important? I object to it. I object to their throwing boquets.
The Court: it is not material.
By Mr. Fitzgibbon: I understand that it is not material. I will withdraw the question.
The Court: What did the witness say about the profits from gas?
By Mr. Fitzgibbon: The witness said $264,592.41.

Q. And you arrived at that by deducting from the total amount of gas which was sold, amounting to $484,000. in round numbers, these two charges of $107,529.13, general expenses, and $114,317.03, money advanced by the Logan Company for construction of lines, and royalties and supplies.
A. In the statement that I made last night, I merged those
630 with what the Newark books show, and I cannot say whether the figures which you have and those that I made last night agree or not.
Q. Well, that is the way you reach that $264,000.
A. Yes, sir.
Q. And that wasn't profit to the Newark Company unless this gas was a gift to them.
A. I wouldn't answer that, because I don't know.
Q. Well, so far as the books show.
A. Yes, sir, as far as the books show.

By Mr. Fitzgibbon: That is all.

Mr. SUTER.

Redirect examination.

Examined by Mr. Roderic Jones:

Q. You arrived at that figure by deducting from the total amount of gas sold during those years everything that you could find charged on the books, didn't you?
A. Yes, sir, with the exception of some running accounts; there

were possibly a hundred or more individual accounts which I ignored; they wouldn't amount to much.

Q. You took out of the total net gross receipts everything in the nature of an expense account or a charge that you could find.

A. Yes, sir.

Q. On cross-examination, you said, that, in 1898, $101,560. was paid in obtaining control of the Company. How was that done? By purchasing the assets or the stock?

A. So far as the records show, by the purchase of the stock of the company. No deed was made that I could find——

631 Q. You said that there was no record of the stock of the company, or no stock book of the company, in the Everett days.

A. Do you mean a stock register?

Q. Yes, sir.

A. No, sir. There wasn't any.

Q. There were, however, the stubs, of the stock certificates.

A. Yes.

Q. And from them you obtained such information on that subject as you testified to yesterday.

A. I could explain how I arrived at a determination of the facts with Mr. Broder's knowledge.

By Mr. Fitzgibbon: I don't think that is material.

The Court: It is not material.

By Mr. Roderic Jones: That is all. We rest.

By Mr. Fitzgibbon: This (indicating) is that special contract.

The Court: It would have to be identified, unless they waive it.

By Edward Kibler: All right; it was exhibited to us, and we have no objection to it.

By Mr. Fitzgibbon: I don't know whether it was offered yesterday or not.

(Said paper was marked V, and a true copy thereof will be found in a preceding portion of this record.)

The Court: You have no further evidence?

632 By Mr. Fitzgibbon: No, sir.

The Court: Probably the Court cannot return here until the latter part of the month.

By Mr. Roderic Jones: We will all agree that the ending of the term will make no difference.

By Judge Douglass: No, sir, we will raise no question as to the time. We will raise no objection as to that.

And, no other, or further, testimony, or evidence, was offered or given by either of the parties; the foregoing comprising the entire testimony and evidence heard in the case.

# CHARTS

# TOO LARGE FOR FILMING

# EXHIBIT N SHEET 2

DRY HOLE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

LIST OF DRY HOLES DRILLED DURING THE FOLLOWING YEARS

| | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Licking County | | | | | | | | | | | | |
| Burlington Township | | 1 | 1 | | | | | | | | | 2 |
| Bennington " | | | 1 | 1 | | | | 1 | | | | 3 |
| Newton " | | | | | | | 2 | 1 | | 1 | | 4 |
| Fallsbury " | | | | | | | | | 1 | | | 1 |
| Union " | | | | 1 | | 1 | | 1 | | | | 3 |
| Licking " | | | | | | | | | 2 | 3 | | 5 |
| Washington " | | | | | | | | | 1 | | | 1 |
| Newark " | | | | | | | | | | 1 | | 1 |
| Eden " | | | | | | | | | 1 | 2 | | 3 |
| Madison " | | | | | | 1 | | | | | 1 | 2 |
| Mary Ann | | | | | | | | | | | 1 | 1 |
| Knox County | | | | | | | | | | | | |
| Berlin Township | 1 | | | | | | | | | 1 | | 2 |
| Middleburg " | | 1 | | | | | | | | | | 1 |
| Miller " | | | 4 | 1 | 2 | 2 | | | | | | 9 |
| Pleasant " | | | | 1 | | | | | | | | 1 |
| Clinton " | | | | | | | 3 | | | | | 3 |
| Milford " | | | | | | | 1 | 1 | | | | 2 |
| Jackson " | | | | | | | | 1 | | | | 1 |
| Clay " | | | | | | | | | | 1 | | 1 |
| | 1 | 2 | 6 | 4 | 2 | 4 | 6 | 5 | 5 | 9 | 2 | 46 |

Dry Holes drilled during 1901 - 1
1902 - 2
1903 - 6
1904 - 4
1905 - 2
1906 - 4
1907 - 6
1908 - 5
1909 - 5
1910 - 9
1911 - 2

3-5

# EXHIBIT N SHEET 3

## ABANDONED WELL DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

ABANDONED WELLS

| | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hocking County** | | | | | | | | | | | | |
| Burlington Township | | | | | 1 | 2 | 3 | 5 | 9 | 1 | 1 | 22 |
| Hensington " | | | | | | | | 3 | 4 | 9 | | 16 |
| Falkbury " | | | | | | | | 2 | | | | 2 |
| Union " | | | | | | | 1 | | | 1 | 1 | 3 |
| Liberty " | | | | | | | | | | 1 | | 1 |
| Washington " | | | | | | | | | 1 | | | 1 |
| **Knox County** | | | | | | | | | | | | |
| Miller Township | | | | 1 | | | 1 | 8 | 1 | 8 | 4 | 23 |
| Milford " | | | | | | 1 | | | 1 | 1 | | 3 |
| Jackson " | | | | | | 1 | | 1 | | | | 2 |
| Morgan " | | | | | | | 2 | | 2 | 1 | | 5 |
| Clinton " | | | | | | | | 1 | 4 | 6 | 2 | 10 |
| Pleasant " | | | | | | | | | 1 | 3 | 3 | 7 |
| | 1 | 1 | 1 | 1 | 1 | 4 | 7 | 20 | 23 | 30 | 11 | 97 |

| | |
|---|---|
| Abandoned for 1904 - | 1 |
| 1905 - | 1 |
| 1906 - | 4 |
| 1907 - | 7 |
| 1908 - | 20 |
| 1909 - | 23 |
| 1910 - | 30 |
| 1911 - | 11 |
| Total | 97 |

# EXHIBIT N SHEET 4

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

AVERAGE ROCK PRESSURES IN PERRY AND HOCKING COUNTIES FOR THE FOLLOWING YEARS.

| | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
|---|---|---|---|---|---|---|---|---|---|---|
| **HOCKING COUNTY** | | | | | | | | | | |
| Bennington Township. | | | | | | | | | | |
| Burlington | | | | | | | | | | |
| Elen | | | | | | | | | | |
| Granville | | | | | | | | | | |
| Licking | | | | | | | | | | |
| Madison | | | | | | | | | | |
| St. Albans | | | | | | | | | | |
| Liberty | | | | | | | | | | |
| Washington | | | | | | | | | | |
| Union | | | | | | | | | | |
| **PERRY COUNTY** | | | | | | | | | | |
| Clay Township | | | | | | | | | | |
| Clinton | | | | | | | | | | |
| Harrison | | | | | | | | | | |
| Piedmont | | | | | | | | | | |
| Milford | | | | | | | | | | |
| Miller | | | | | | | | | | |
| Morgan | | | | | | | | | | |

| | |
|---|---|
| Average for 1902 - 760 | |
| 1903 - 691 | |
| 1904 - 678 | |
| 1905 - 488 | |
| 1906 - 430 | |
| 1907 - 483 | |
| 1908 - 517 | |
| 1909 - 510 | |
| 1910 - 242 | |
| 1911 - 284 | |

EXHIBIT N SHEET 5
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN
NATURAL GAS AND FUEL COMPANY

BENNINGTON TOWNSHIP---LICKING COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mary Cunningham #1 | 160 | Sept. 4, 1903 | 717 | 440 | 316 | 314 | 265 | 170 | | 63 | | |
| Mary Renton #1 | 175 | Nov. 26, 1903 | 700 | 467 | 431 | 390 | 288 | | | 80 | | |
| Ephriam Dally #1 | 176 | March 18, 1903 | | | | | | | | | | |
| John Hilbrant | 177 | Nov. 20, 1903 | 690 | 555 | 463 | 419 | 237 | | | | | Dry Hole |
| Mary Rogers #1 | 179 | Dec. 3, 1903 | | | 321 | 295 | 247 | 162 | | 94 | | |
| Mary Benton #2 | 193 | Feb. 18, 1904 | | | | | | | | | | |
| Christian Church #2 | 200 | Feb. 25, 1904 | | 496 | 319 | 295 | 250 | 160 | | | | Dry Hole |
| John Bowman #1 | 201 | March 7, 1904 | | | 326 | 303 | 40 | 81 | | | | Aband. Feb. 7, 1910 |
| " #2 | 202 | June 20, 1904 | | 402 | 220 | 202 | 172 | 154 | | | | |
| D. Leming #1 | 207 | May 21, 1904 | | 538 | 311 | 279 | 165 | | | | | Aband. March 3, 1910 |
| W.E. Trotter #1 | 215 | July 2, 1904 | | 555 | 321 | 275 | 185 | | | | | Aband. Dec. 10, 1908 |
| W.H. Hall #1 | 216 | Aug. 19, 1904 | | 440 | 261 | 307 | 197 | | 65 | | | |
| D. Leming #3 | 231 | Oct. 5, 1904 | | 542 | 371 | 275 | 162 | 145 | 103 | 85 | | |
| Levi Knowlton #1 | 262 | Jan. 6, 1907 | | | | | 230 | 170 | 102 | 75 | | |
| John Hilbrant #2 | 263 | Nov. 1, 1904 | | 605 | 496 | 395 | 230 | 154 | 93 | | | |
| Elias Kettle #1 | 284 | Aug. 9, 1905 | | | 406 | 339 | 200 | 183 | | | | Aband. Dec. 10, 1909 |
| John Hilbrant #3 | 322 | Dec. 19, 1905 | | | 575 | 478 | 235 | 152 | 78 | 63 | | Aband. Feb. 12, 1910 |
| J.W. Hall #1 | 337 | June 8, 1906 | | | | 408 | 254 | 166 | 105 | 85 | | |
| Rimer & Hall #1 | 338 | June 21, 1906 | | | | 538 | 410 | | 67 | | | |
| J.W. & Mary Hall #2 | 358 | Aug. 16, 1906 | | | | 570 | 455 | 267 | 107 | | | |
| W.H. Hall #2 | 393 | Nov. 16, 1906 | | | | 341 | 244 | 160 | 101 | 95 | | |
| Wamie M. Watson #1 | 398 | Nov. 15, 1906 | | | | 330 | 237 | | 272 | 220 | | |
| Mary Watson #2 | 407 | Feb. 18, 1907 | | | | | 231 | 157 | | | | |
| Knowlton, Levi #2 | 422 | May 29, 1907 | | | | | 257 | 185 | 94 | 85 | | Aband. Jan. 30, 1909 |
| J.B. Smith #1 | 430 | July 31, 1907 | | | | | 325 | 212 | 127 | 315 | | |
| C.G. Houck #1 | 438 | July 3, 1907 | | | | | 298 | 202 | | | | |
| Bryans & Hawkins #1 | 526 | June 19, 1908 | | | | | [illegible] | 286 | 116 | 88 | | Sold |
| Park Decrow #3 | 529 | May 11, 1908 (Pur.) | | | | | | 161 | | | | |
| " " #4 | 530 | " " " | | | | | | 198 | 111 | 134 | | |
| " " #6 | 531 | " " " | | | | | | 180 | 132 | 155 | | |
| " " #7 | 532 | " " " | | | | | | 180 | 142 | 118 | | |
| " " #8 | 533 | " " " | | | | | | 126 | 185 | 222 | | |
| E.B. & G.W. Davis #1 | 534 | " " " | | | | | | 146 | 108 | 70 | | |
| A.C. Hatch #1 | 535 | " " " | | | | | | 131 | 102 | | | Aband. March 24, 1910 |
| A.C. Hatch #2 | 536 | " " " | | | | | | 155 | | | | Aband. March 12, 1910 |
| A.C. Hatch #3 | 537 | " " " | | | | | | | | | | Aband. May 30, 1908 |
| A. Hatch et al #1 | 538 | " " " | | | | | | 150 | 87 | 63 | | |
| " " #2 | 529 | " " " | | | | | | 211 | 122 | 116 | | |

**EXHIBIT N SHEET 6**

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

Sheet 2

BENNINGTON TOWNSHIP---LICKING COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W.E. Helphrey #1 | 540 | May 11, 1908 (Pur.) | | | | | | 245 | 190 | 117 | | |
| John W. Roberts #1 | 541 | " " " | | | | | | 186 | | | | |
| Mary L. Simmons et al #1 | 542 | " " " | | | | | | 142 | 108 | | | |
| " " " #2 | 543 | " " " | | | | | | | | | | Aband. May 11, 1908 |
| " " " #3 | 544 | " " " | | | | | | 137 | 111 | | | Aband. Aug. 31, 1910 |
| " " " #4 | 545 | " " " | | | | | | 138 | 140 | | | |
| W.M. Shipley #1 | 546 | " " " | | | | | | 138 | 115 | 75 | | |
| J.R. Watson #1 | 547 | " " " | | | | | | 152 | 98 | 79 | | |
| " " #2 | 548 | " " " | | | | | | 140 | 85 | 65 | | |
| W.C. Woodbury #1 | 549 | " " " | | | | | | 143 | 108 | 75 | | |
| J.O. Smoots #1 | 565 | Aug. 12, 1908 | | | | | | 257 | 132 | 90 | | |
| M.H. Bryans #1 | 567 | Aug. 12, 1908 | | | | | | 265 | 108 | 75 | | |
| J.W. Edman #1 | 579 | Oct. 3, 1908 | | | | | | | | | | |
| Willard Rowe #1 | | | | | | | | 225 | 120 | 75 | | Dry Hole |

| | |
|---|---|
| Dry Holes | 3 |
| Abandoned | 13 |
| Sold | 1 |
| Wells | 35 |
| Total | 52 |

Average for 1903 - 702
1904 - 506
1905 - 366
1906 - 350
1907 - 242
1908 - 174
1909 - 101
1910 - 106

EXHIBIT N SHEET 7
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN
NATURAL GAS AND FUEL COMPANY

Sheet 1^

HEMLOCK TOWNSHIP---HOCKING COUNTY

| Name of Lessor | Ser'l | Completed | Initial | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W.C. Butcher #1 | 30 | July 28, 1900 | | 600 | 371 | 270 | 205 | 192 | 165 | 136 | 130 | | |
| J.J. Yoakum #1 | 42 | Jan. 16, 1901 | | 530 | | 270 | 243 | 146 | 141 | 165 | 136 | | Disc. |
| S.C. Dunlap #1 | 61 | Oct. 3, 1901 | 780 | 675 | 280 | 399 | 419 | 290 | 270 | 235 | 190 | | |
| Dwight Smythe #1 | 68 | Jan. 30, 1902 | | 525 | | 340 | 300 | 207 | 235 | 208 | 175 | 170 | Aband. Feb. 1, 1911 |
| Madison Melick #1 | 69 | Jan. 5, 1902 | | 565 | 500 | 424 | 380 | 354 | 295 | 286 | 225 | | |
| Wm. Dunlap #1 | 73 | April 10, 1902 | | 600 | 657 | 554 | 453 | 366 | 336 | 283 | 235 | | |
| H.H. O'Connor #1 | 76 | June 5, 1902 | | 570 | 465 | 486 | 400 | 291 | 257 | 228 | 194 | | |
| Mary J. Daniels #1 | 77 | June 6, 1902 | | 540 | 520 | 433 | 415 | 314 | 256 | 236 | | | |
| S.J. McNaughton #1 | 78 | June 26, 1902 | | | | | | | | | | | |
| J.C. Stinson #1 | 80 | July 9, 1902 | | 600 | 525 | 408 | 412 | 286 | | | 190 | | Dry Hole |
| Robert McLees #1 | 82 | Aug. 5, 1902 | | | 645 | 453 | 433 | 327 | 308 | | | | |
| Harvey Simmons #1 | 83 | Aug. 6, 1902 | | 525 | 373 | 246 | 206 | 210 | | | | | |
| Geo. Robinson #1 | 85 | Aug. 14, 1902 | | 475 | 363 | 255 | 202 | 197 | 175 | 155 | 125 | | Aband. Dec. 17, 1907 |
| A.J. Moreland #1 | 86 | Aug. 15, 1902 | | 580 | 500 | 396 | 405 | 321 | 243 | 201 | 175 | 61 | |
| P.H. Warner #1 | 87 | Aug. 30, 1902 | | 540 | 490 | 356 | 320 | 272 | 235 | 218 | 180 | | |
| C.C. Debolt #1 | 89 | Sept. 11, 1902 | 880 | 640 | | | | | | | | | |
| Marion Boyd #1 | 92 | Sept. 20, 1902 | | | 615 | 373 | 382 | 302 | | | | | Aband. Nov. 3, 1905 |
| Mary E. Shipp #1 | 93 | Sept. 29, 1902 | | 515 | 452 | 231 | 207 | 157 | | | | | |
| Alice J. Moreland #2 | 94 | Sept. 30, 1902 | | 640 | | 471 | 432 | 317 | 270 | | | | Aband. Sept. 1907 |
| Thomas Griffith #1 | 100 | Nov. 5, 1902 | 780 | 560 | | 420 | 392 | 258 | | | | | Aband. April 10, 1909 |
| E.R. Wright #1 | 106 | Nov. 13, 1902 | | 600 | | 268 | 239 | 230 | 190 | | | | Aband. Dec. 18, 1908 |
| David Knoviler #1 | 107 | Nov. 19, 1902 | | 513 | 510 | 338 | 291 | 253 | 225 | | 130 | | Aband. Aug. 17, 1908 |
| L.L. Edman #1 | 108 | May 15, 1903 | | 690 | | 382 | 358 | 238 | | | | | |
| Sarah & Enoch Bebout #1 | 109 | Dec. 3, 1902 | | 608 | | 330 | 320 | 260 | | | | | Aband. Nov. 15, 1909 |
| L.L. Edman #2 | 111 | Jan. 5, 1903 | | 650 | 550 | 525 | | | | | | | |
| L. & B.H. Sigler #1 | 116 | Dec. 28, 1902 | | 650 | 480 | 307 | 302 | 163 | 210 | 170 | | | Aband. July 31, 1908 |
| J.W. Speelman #1 | 117 | Feb. 4, 1903 | | 570 | 500 | 296 | 275 | 265 | 185 | | | | |
| H.A. Wagner #1 | 124 | Feb. 4, 1903 | | 760 | 621 | 533 | 486 | 407 | 355 | 315 | 270 | 211 | Aband. Dec. 1, 1909 |
| W.F. Wagner #1 | 125 | June 23, 1903 | | | 480 | 425 | 448 | 285 | | | 145 | | |
| W.A. Hunter #1 | 126 | March 23, 1903 | | 590 | | 313 | 255 | | | | | | |
| Chas. Griffith #1 | 128 | April 22, 1903 | | 760 | 420 | 386 | 390 | 250 | | 200 | | | Aband. April 22, 1908 |
| Hattie Dunlap #1 | 135 | April 29, 1903 | | 650 | 363 | 235 | 220 | 188 | 140 | | 110 | | |
| Thos. Griffith #2 | 136 | June 17, 1903 | | | 635 | 448 | 474 | 312 | 270 | 230 | 215 | | |
| A.R. Wright #1 | 139 | July 18, 1903 | | 720 | | 380 | 298 | 220 | | | | | |
| H.R. Catt #1 | 143 | July 10, 1903 | | 695 | 445 | 374 | 327 | 246 | 204 | 165 | 145 | 145 | Aband. March 16, 1908 |
| B.C. & Alma Quick #1 | 144 | Aug. 1, 1903 | | 700 | 543 | 243 | 223 | 190 | 140 | | | | Aband. Nov. 15, 1909 |

# EXHIBIT N SHEET 8

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

Sheet 2

BURLINGTON TOWNSHIP---LICKING COUNTY

| Name of Lessor | Ser'l | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mrs. Deborah Larimore #1 | 150 | Aug. 19, 1903 | 545 | 345 | 253 | 270 | 188 | 169 | 145 | 125 | | |
| E.J. & R.H. Larimore #1 | 151 | July 18, 1903 | 650 | | 398 | 341 | | | | | | Aband. Sept. 30, 1908 |
| Sarah A. Hanger #1 | 152 | Aug. 18, 1903 | 687 | 680 | 531 | 472 | 333 | 320 | 287 | | | Aband. Nov. 1, 1910 |
| James H. Wright #1 | 156 | Aug. 29, 1903 | 700 | 647 | 480 | 457 | 200 | 275 | | | | Pulled Dec. 1909 |
| John Maddox #1 | 162 | Oct. 26, 1903 | 530 | | 388 | 250 | 182 | 160 | | | | Aband. March 5, 1909 |
| Agnes McNaughten et al #1 | 163 | Nov. 7, 1903 | | 460 | | | | 166 | | | | |
| Matilda Moore et al #1 | 166 | Nov. 6, 1903 | 600 | | 346 | 313 | 150 | | | | | |
| J.P. Butcher #1 | 167 | Dec. 4, 1903 | 700 | 335 | 233 | 223 | 192 | 145 | | 100 | | |
| C.W. Bell #1 | 168 | Nov. 13, 1903 | 580 | 465 | 343 | 305 | 258 | 224 | 199 | 162 | | |
| India C. Houser #1 | 173 | Sept. 1903 | 570 | 540 | 473 | 446 | 308 | 293 | 233 | 257 | | |
| Angie Bell et al #1 | 178 | Nov. 13, 1903 | | 350 | 214 | 220 | 170 | 130 | | 77 | | |
| S.A. Parks #1 | 182 | Dec. 1, 1903 | | | | | | | | | | Dry Hole |
| C.E. Debolt #2 | 185 | Dec. 12, 1903 | 670 | 325 | 305 | 225 | | | | | | Aband. July 31, 1906 |
| Madison & Mary Melick #2 | 186 | Dec. 18, 1903 | 600 | 625 | 493 | 464 | 392 | 388 | 314 | 252 | | |
| Mark Looker #1 | 191 | Dec. 26, 1903 | | 630 | 414 | 336 | 282 | 204 | 204 | 161 | | |
| P.W. Bell #1 | 220 | Oct. 14, 1904 | | 590 | 386 | 324 | 290 | 81 | 73 | 57 | 45 | |
| D.W. Larue #1 | 227 | Aug. 9, 1904 | | 605 | 453 | 413 | 348 | 299 | 279 | 237 | | |
| Sam'l McNaughton #1 | 241 | Jan. 8, 1905 | | | 443 | 390 | 308 | 200 | | | | Aband. Aug. 30, 1909 |
| Robert McLees #3 | 242 | Nov. 28, 1904 | | 550 | 477 | 457 | 346 | 282 | 287 | 180 | | |
| Ed. Robinson #1 | 298 | Sept. 20, 1905 | | | 341 | 288 | 193 | 205 | 158 | 142 | 135 | |
| L.L. Edman #3 | 312 | Nov. 21, 1905 | | | 522 | 425 | 195 | 205 | | 133 | | |
| C.C. Bone #1 | 346 | July 13, 1906 | | | | 253 | | | | | | Nov. 30, 1907 |
| J.S. Adams #1 | 400 | Dec. 17, 1906 | | | | 410 | 356 | 330 | 255 | 225 | | |
| John M. Riley #1 | 426 | May 30, 1907 | | | | | 650 | 400 | | | | |
| M.E.B. Reynolds #1 | 431 | July 6, 1907 | | | | | 355 | 310 | 221 | 199 | | |
| Levi Knowlton #3 | 460 | Aug. 25, 1907 | | | | | 650 | 430 | 393 | 243 | 192 | |
| J.F. Riley #1 | 466 | Sept. 9, 1907 | | | | | 600 | 468 | 405 | | | |
| Levi Knowlton #5 | 487 | Nov. 8, 1907 | | | | | 650 | 510 | 436 | 238 | 161 | |
| J.W. Riley #2 | 501 | Nov. 30, 1907 | | | | | 500 | 255 | 221 | 183 | | |
| S.E. Dunlap #2 | 361 | Oct. 10, 1908 | | | | 315 | 272 | 250 | 200 | | | Aband. July, 1909 |
| J.W. Riley #3 | 582 | Oct. 14, 1908 | | | | | | 530 | 445 | 309 | 258 | |
| Levi Knowlton #7 | 589 | Nov. 24, 1908 | | | | | | 566 | 387 | 280 | 226 | |
| Harriett Lamson #1 | 673 | Oct. 31, 1909 | | | | | | | 538 | 354 | 285 | |

Average for 1903 - 609
1904 - 494
1905 - 383
1906 - 354
1907 - 289
1908 - 261
1909 - 252
1910 - 185
1911 - 180

| | |
|---|---|
| Abandoned | 22 |
| Dry Holes | 2 |
| Wells | 45 |
| Total | 69 |

# EXHIBIT N SHEET 9

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

RUSH TOWNSHIP - LICKING COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G.R. Marriott #1 | 611 | March 14, 1909 | | | | | | | 720 | 538 | | |
| M.E. Elliott #1 | 621 | May 27, 1909 | | | | | | | 701 | 569 | | |
| " " #2 | 637 | July 26, 1909 | | | | | | | 711 | 563 | | |
| " " #3 | 647 | Aug. 1, 1909 | | | | | | | 711 | 544 | | |
| " " #4 | 662 | Sept. 14, 1909 | | | | | | | 700 | 529 | | |
| C.E. & D.M. Reynolds #1 | 663 | Oct. 8, 1909 | | | | | | | | | | Dry Hole |
| S.M. Hamilton #1 | 664 | Oct. 8, 1909 | | | | | | | 705 | 538 | | |
| M.E. Hughes #1 | 669 | Nov. 3, 1909 | | | | | | | 546 | 431 | | |
| J.E. Smith & M.E. Gist #1 | 670 | Oct. 29, 1909 | | | | | | | 673 | 462 | | |
| W.A. Elliott #1 | 683 | Nov. 20, 1909 | | | | | | | 645 | 548 | | |
| James Hoare #1 | 692 | Dec. 22, 1909 | | | | | | | 665 | 531 | | |
| J. Smith & M.E. Gist #2 | 693 | Dec. 25, 1909 | | | | | | | 605 | 436 | | |
| S.T. & D.M. Harris #1 | 696 | Jan. 4, 1910 | | | | | | | | 462 | | |
| W.A. Elliott #2 | 700 | Feb. 11, 1910 | | | | | | | | 584 | | |
| J. & B. Braden #1 | 706 | March 20, 1910 | | | | | | | | 696 | | |
| A.P. Van Winkle #1 | 707 | March 20, 1910 | | | | | | | | 498 | | |
| S.P. Elliott #1 | 760 | June 2, 1910 | | | | | | | | 577 | | |
| M. Neighberger #1 | 761 | June 3, 1910 | | | | | | | | | | Dry Hole |
| Ora L. Shannon #1 | 763 | May 27, 1910 | | | | | | | | 719 | 843 | |
| M.E. Hughes #2 | 772 | July 1, 1910 | | | | | | | | 218 | 350 | |
| " " #3 | 774 | July 6, 1910 | | | | | | | | 522 | | |
| F.M. Wilkins #1 | 781 | Aug. 10, 1910 | | | | | | | | 645 | | |
| Wm. Shannon #1 | 788 | Aug. 26, 1910 | | | | | | | | 622 | | |
| A. & P.R. Wilson #1 | 789 | Sept. 5, 1910 | | | | | | | | | | Dry Hole |
| Ellen Neighberger #1 | 794 | Sept. 10, 1910 | | | | | | | | 677 | | |
| A. Harrison #1 | 799 | Oct. 6, 1910 | | | | | | | | 675 | | |
| John Holton et al #1 | 800 | Sept. 29, 1910 | | | | | | | | 735 | | |
| S.T. Harris #2 | 802 | Oct. 8, 1910 | | | | | | | | 377 | 228 | |
| R.E. Wolfenbouser #1 | 811 | Nov. 17, 1910 | | | | | | | | 627 | | |
| C.E. & D.M. Reynolds #1 | 813 | Oct. 22, 1910 | | | | | | | | 710 | | |
| A.P. Van Winkle #2 | 814 | Oct. 29, 1910 | | | | | | | | 685 | | |
| J.M. & W. Neighberger #1 | 818 | Nov. 14, 1910 | | | | | | | | | | Dry Hole |
| John T. Hughes #1 | 819 | Dec. 2, 1910 | | | | | | | | | 595 | |
| A. & P.R. Wilson #2 | 830 | Jan. 13, 1911 | | | | | | | | | | Dry Hole |
| P.M. Wilkin #2 | 833 | Dec. 2, 1910 | | | | | | | | | 690 | |
| Ava Burrell et al #1 | 843 | Jan. 25, 1911 | | | | | | | | | 615 | |
| C.F. McMillin #1 | 845 | Jan. 19, 1911 | | | | | | | | | 366 | |
| S.T. & D.M. Harris #1 | 849 | Jan. 21, 1911 | | | | | | | | | 700 | |
| Wm. & A. Rebour #1 | 859 | March 13, 1911 | | | | | | | | | | |

687

## EXHIBIT N SHEET 10

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

[illegible] JONESTOWN---LICK RUN COUNTY

| | | | |
|---|---|---|---|
| 30 Wells | Dry 5 Wells 25 | 30 | Average for 1909 - 671<br>" " 1910 - 565<br>" " 1911- 487 |

## EXHIBIT N SHEET 11

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

GRANVILLE TOWNSHIP--LICKING COUNTY

| Name of Lessor | Serial No. | Completed | 1907 | 1908 | 1909 | 1910 | 1911 | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | | AVERAGE ROCK PRESSURE | | | | | |
| C.J. Kelly #1 | 488 | Oct. 21, 1907 | 690 | 500 | 225 | 220 | | |
| Chas. Avery #1 | 508 | Dec. 2, 1907 | 560 | 509 | 297 | 192 | | |
| Thos. Dunaway #1 | 552 | July 1,-1908 | | 488 | 220 | 155 | | |
| " " #2 | 561 | Sept. 11, 1908 | | 410 | 226 | 157 | | |
| " " #3 | 575 | Oct. 18, 1908 | | 350 | 208 | 156 | | |
| E.S. Loyd #1 | 589 | Dec. 7, 1908 | | 690 | 610 | 396 | | |
| C.D. Rose #1 | 607 | Oct. 2, 1910 | | | | 650 | | |
| " " #2 | 625 | Nov. 10, 1910 | | | | 600 | | |
| 8 Wells | | | 1250 | 2941 | 1876 | 2946 | | |

Average for 1907 - 625
" " 1908 - 490
" " 1909 - 312
" " 1910 - 368

# EXHIBIT N SHEET 12

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

LICKING TOWNSHIP-- LICKING COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Joe. Davis #1 | 615 | April 21, 1909 | | | | | | | | | | |
| Leroy Walters #1 | 624 | May 18, 1909 | | | | | | | | | | Dry |
| T.B. Cochran #1 | 632 | July 17, 1909 | | | | | | | | | | |
| Isaac Coffman #1 | 646 | July 9, 1909 | | | | | | | | | | Dry |
| H.H. Lawyer #1 | 652 | Aug 11, 1909 | | | | | | | 650 | 315 | | |
| C. Dicken #1 | 660 | Sept. 26, 1909 | | | | | | | 475 | 225 | | |
| C.F. Towell et al #1 | 680 | Oct. 27, 1909 | | | | | | | 700 | 451 | | |
| Leroy Walters #2 | 685 | Nov. 11, 1909 | | | | | | | 550 | 252 | | |
| W.C. Fox #1 | 690 | Dec. 15, 1909 | | | | | | | 510 | 280 | | |
| Mary & Edw. Walters #1 | 694 | Dec. 17, 1909 | | | | | | | 660 | 441 | | |
| Chas. L.E. Hendren #1 | 762 | May 18, 1910 | | | | | | | | | | |
| A.M. & L.E. Arnold #1 | 864 | May 24, 1910 | | | | | | | | | | Dry |
| D. Bader #1 | 769 | July 14, 1910 | | | | | | | | | | Dry |
| W.J. & J.W. Grove | 777 | July 16, 1910 | | | | | | | | | | Dry |
| Isaac Coffman #2 | 778 | Aug. 26, 1910 | | | | | | | | 625 | | |
| Isaac Green #1 | 792 | Sept. 1, 1910 | | | | | | | | 410 | | |
| G.M. Tabler #1 | 816 | Oct. 24, 1910 | | | | | | | | 755 | | |
| A.J. Green #1 | 817 | Oct. 27, 1910 | | | | | | | | 290 | | |
| A.B. Gray #1 | 823 | Nov. 26, 1910 | | | | | | | | | | Dry |
| " " #2 | 824 | Nov. 22, 1910 | | | | | | | | | | Dry |
| I. Green #1 | 841 | Dec. 6, 1910 | | | | | | | | 605 | | |
| Nada C. Sperry #1 | 805 | Oct. 11, 1910 | | | | | | | | 395 | | |
| " " " #2 | 844 | Dec. 31, 1910 | | | | | | | | | | |
| | | | | | | | | | 3545 | 5044 | | |

23 Wells

Dry 7
Wells 16

Average for 1909 - 590
" " 1910 - 420
" " 1911 -

# EXHIBIT N SHEET 13

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

HEWETT TOWNSHIP--HOCKING COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Serial No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wm. Veach | 212 | Sept. 7, 1891 | | | | | | | | | 200 | |
| Daniel Ferry | 110 | March 1, 1891 | | | | | | | | | 280 | |

2 Wells Average for 1911 - 240

# EXHIBIT N SHEET 14

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

NEWARK DISTRICT—LICKING COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Serial No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O.P. Channell #2 | 437 | May 26, 1907 | | | | | 700 | 412 | 255 | 167 | | |
| " #3 | 445 | July 5, 1907 | | | | | 700 | 430 | 285 | | | |
| W.A. Harvey #1 | 439 | Aug. 21, 1907 | | | | | 700 | 466 | 282 | 170 | | |
| O.H. Channell #4 | 444 | Aug. 13, 1907 | | | | | 700 | 385 | 295 | 413 | | |
| F.M. Arnold #1 | 447 | Sept. 28, 1907 | | | | | 700 | 444 | 330 | 275 | | |
| W.A. Harvey #2 | 454 | Oct. 20, 1907 | | | | | 690 | 468 | 330 | 132 | | |
| O.H. Channell #5 | 459 | Oct. 20, 1907 | | | | | 690 | 433 | 330 | 220 | 270 | |
| Gordon & Gaskell #1 | 502 | Nov. 14, 1908 | | | | | | 440 | 321 | 260 | | |
| Levi Knowlton #8 | 504 | Nov. 23, 1908 | | | | | | 440 | 366 | 415 | | |
| " #6 | 451 | June 17, 1908 | | | | | | | 296 | 169 | | |
| O.H. Channell #6 | 463 | July 4, 1908 | | | | | | | 335 | | | |
| W.A. Harvey #3 | 455 | July 20, 1908 | | | | | | | 345 | 88 | 88 | |
| Levi Knowlton #10 | 466 | Aug. 17, 1908 | | | | | | | 490 | | | |
| J.H. & E. Newman #1 | 506 | Aug. 22, 1908 | | | | | | | 586 | 220 | 88 | |
| Ella. Krantz #1 | 466 | Sept. 30, 1909 | | | | | | | | 490 | | |
| E.V. & J.H. Newman #2 | 506 | Oct. 8, 1910 | | | | | | | | 570 | | |
| J.J. & E. Bailey #1 | 489 | Nov. 26, 1910 | | | | | | | | | | |

Average for 1907 - 667
1908 - 343
1909 - 432
1910 - 337
1911 - 267

Wells 17

## EXHIBIT N SHEET 15

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

ST. ALBANS TOWNSHIP---LICKING COUNTY

| Name of Lessor | Sar'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W.E. Fulton #1 | 453 | Aug. 15, 1907 | | | | | 360 | 250 | 180 | 125 | | |
| | | | | | | | 1 Well | | | | | |

EXHIBIT N SHEET 16

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

WASHINGTON TOWNSHIP---LICKING COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Ser'l | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Levi Knowlton #4 | 476 | Oct. 23, 1907 | | | | | 735 | | 272 | 220 | | |
| Levi Knowlton #6 | 550 | July 26, 1908 | | | | | | 616 | | | | |
| Martha Goff #1 | 555 | Aug. 9, 1908 | | | | | | 620 | 378 | 190 | | |
| Martha Goff #2 | 576 | Sept. 24, 1908 | | | | | | 600 | | | | Abandoned Nov. 9, 1910 |
| I.B. McCleeland #1 | 577 | Oct. 6, 1908 | | | | | | 552 | 365 | 248 | | |
| " " #2 | 599 | Nov. 21, 1908 | | | | | | 505 | 385 | 226 | | |
| Martha Goff #3 | 630 | June 18, 1909 | | | | | | | 625 | 185 | | |
| Jas. Evers #1 | 650 | Sept. 11, 1909 | | | | | | | 685 | 487 | | |
| John Harvey #2 | 661 | Sept. 16, 1909 | | | | | | | 610 | 324 | | |
| John Harvey #3 | 665 | Oct. 2, 1909 | | | | | | | 520 | 338 | | |
| Jas. F. Evers #2 | 682 | Dec. 3, 1909 | | | | | | | | 602 | | Dry |
| W.S. Thrapp #1 | 698 | Feb. 8, 1910 | | | | | | | | 561 | 433 | |
| W.S. Thrapp #2 | 782 | Aug. 29, 1910 | | | | | | | | 593 | 506 | |
| J.L. Lyons #1 | 783 | July 24, 1910 | | | | | | | | 585 | 398 | |
| C.J. Abbott #1 | 795 | Sept. 10, 1910 | | | | | | | | 601 | 508 | |
| L.L. Lyons #2 | 804 | Oct. 21, 1910 | | | | | | | | 475 | 400 | |
| W.B. Thrapp #3 | 822 | Nov. 21, 1910 | | | | | | | | 647 | 565 | |
| David P. Belt #1 | 832 | Dec. 2, 1910 | | | | | | | | | 608 | |
| W.J. McC lelland #1 | 846 | Jan. 18, 1911. | | | | | | | | | | |

17 Wells
1 Dry
1 Abandoned
Total 19

Average for 1907 - 735
" " 1908 - 598
" " 1909 - 480
" " 1910 - 414
" " 1911 - 395

EXHIBIT N SHEET 17
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

UNION TOWNSHIP---LICKING COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J.T. Brown #1 | 240 | Nov. 26, 1904 | | | | | | | | | | Dry Hole |
| C.M. Thompson #1 | 333 | July 3, 1906 | | | | | | | | | | Dry Hole |
| Noah Helser #1 | 469 | Nov. 22, 1907 | | | | | 760 | 616 | 422 | 170 | | |
| John L. Jones #1 | 494 | Dec. 14, 1907 | | | | | 360 | 268 | 220 | 156 | | |
| David McBrown #1 | 510 | Jan. 4, 1908 | | | | | | 605 | 395 | 250 | | |
| Alfred Wells #1 | 512 | April 1, 1908 | | | | | | 481 | 255 | 145 | 160 | |
| J. & B. Cain #1 | 518 | March 27, 1908 | | | | | | | | | | Dry Hole |
| Michael Lorents #1 | 518 | May 6, 1908 | | | | | | 383 | | 65 | | |
| " " #2 | 520 | May 23, 1908 | | | | | | 373 | 185 | 90 | | |
| " " #3 | 554 | June 6, 1908 | | | | | | 336 | | | | Aband. May 1, 1910 |
| Alfred Wells #2 | 559 | July 25, 1908 | | | | | | 478 | 260 | 153 | | |
| David McBrown #2 | 563 | Aug. 25, 1908 | | | | | | 570 | 380 | 230 | | |
| Alfred Wells #3 | 574 | Sept. 11, 1908 | | | | | | 433 | 230 | 133 | | |
| M.E. & T. Manson #2 | 583 | Oct. 12, 1908 | | | | | | | 440 | 213 | | |
| B.N. Lemley #1 | 587 | Oct. 31, 1908 | | | | | | 195 | 263 | 98 | | |
| Alfred Wells #4 | 598 | Nov. 23, 1908 | | | | | | 420 | 290 | 175 | | |
| Samantha Larimore #1 | 609 | Jan. 30, 1909 | | | | | | | 225 | 90 | | |
| Lees & Heimel #1 | 610 | Jan. 17, 1909 | | | | | | | 195 | 81 | | Aband. Feb. 16, 1911 |
| M.E. & T. Manson #3 | 627 | May 28, 1909 | | | | | | | 504 | 160 | | |
| M. & T.T. Peters #1 | 667 | Sept. 19, 1909 | | | | | | | 350 | 255 | | |
| Allen T. Fitch #1 | 699 | Sept. 14, 1909 | | | | | | | | 498 | | |

| | |
|---|---|
| Dry Holes | 3 |
| Abandoned | 2 |
| Wells | 16 |
| Total | 21 |

Average for 1907 - 560
1908 - 429
1909 - 314
1910 - 174
1911 - 160

695

# EXHIBIT N SHEET 18

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

LICKEY TOWNSHIP—LICKING COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Ser'l No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Park Darrow #2 | 528 | May 11, 1908 (Pur.) | | | | | | 194 | | 170 | | |
| " " #1 | 527 | May 27, 1905 | | | | | | | | | | Aband. April 14, 1910 |

| | |
|---|---|
| Well Abandoned | 1 |
| | 1 |
| Total | 2 |

## EXHIBIT N SHEET 19

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

GEAT TOWNSHIP HOCK COUNTY

| Name of Lessor | Serl No. | Completed | 1903 | 1904 | 1905 | 1906 | AVERAGE ROCK PRESSURE 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R.D. Purdy #1 | 417 | | | | | | 355 | 421 | 226 | 214 | 213 | |
| J.C. Purdy #1 | 418 | | | | | | 367 | 402 | 345 | 278 | 286 | |
| Wm. Gilmour #1 | 628 | May 3, 1909 | | | | | 700 | | | 421 | | |
| Lizzie & Wm. Gilmour #1 | 654 | Sept. 2, 1909 | | | | | | | 350 | 333 | 350 | |
| " " " #2 | 657 | Aug. 24, 1909 | | | | | | | 650 | 314 | 320 | |
| Wm. & E. Gilmour #2 | 672 | Oct. 28, 1909 | | | | | | | 700 | 344 | | |
| Chas. McClement #1 | 684 | Nov. 22, 1909 | | | | | | | 770 | 509 | | |
| Wm. J. Gilmour #1 | 688 | Dec. 22, 1909 | | | | | | | | 580 | 410 | |
| E. & M. A. Bebout #1 | 695 | Dec. 24, 1909 | | | | | | | 535 | 580 | | |
| J.M. & Wm. Gilmour #2 | 697 | Jan. 10, 1910 | | | | | | | | | | Dr |
| W. & O. Ferguson #1 | 702 | Feb. 21, 1910 | | | | | | | | 576 | 500 | |
| | | | | | | | 1422 | 708 | 3786 | 4170 | 2077 | |

# EXHIBIT N SHEET 20

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

CLAYTON TOWNSHIP—KNOX COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Sec'l No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. Weller #1 | 224 | Aug. 9, 1904 | | 751 | 485 | 375 | 266 | 186 | 101 | 89 | 76 | |
| Isaac Johnson #1 | 245 | Nov. 30, 1904 | | 650 | 400 | 485 | 293 | 186 | | | | Aband. |
| " " #2 | 257 | Feb. 25, 1905 | | | 655 | 558 | 886 | 204 | 125 | 97 | 86 | |
| " " #3 | 272 | June 30, 1905 | | | 698 | 391 | 859 | 264 | 177 | 138 | 125 | |
| Catharine Briggs #1 | 324 | May 18, 1906 | | | | 561 | 268 | 188 | 110 | 90 | 82 | |
| Isaac Johnson #5 | 339 | June 15, 1906 | | | | 612 | 246 | 184 | 117 | 83 | 71 | |
| John R. Schnebly #1 | 341 | June 23, 1906 | | | | 527 | 289 | 208 | 152 | 129 | 121 | |
| Catharine Briggs #2 | 348 | July 18, 1906 | | | | 545 | 277 | 178 | 110 | 87 | 71 | |
| Belle C. Johnson #1 | 349 | July 20, 1906 | | | | 479 | 250 | 172 | | 99 | 98 | |
| John D. Ewing #1 | 356 | Aug. 9, 1906 | | | | 459 | 278 | 191 | 126 | | | Aband. |
| Alfred L. Rush #1 | 357 | Aug. 17, 1906 | | | | 632 | 301 | 181 | 131 | 105 | 100 | |
| Rezin Welsh #1 | 363 | Aug. 24, 1906 | | | | 566 | 367 | 236 | 146 | 114 | 110 | |
| Holt #1 | 365 | Apr. 8, 1906 | | | | 420 | 178 | | | | | Aband. |
| Holt #2 | 366 | Sept. 28, 1906 | | | | 420 | 292 | 216 | 144 | 122 | 120 | |
| Belle C. Johnson #2 | 372 | Sept. 15, 1906 | | | | 549 | 282 | 193 | 108 | 100 | | Aband. |
| Catharine Briggs #3 | 378 | Sept. 21, 1906 | | | | 587 | 330 | 178 | 110 | 88 | 75 | |
| D. Clarence Parrott #1 | 384 | Sept. 27, 1906 | | | | 346 | 202 | 195 | 129 | 104 | 105 | |
| Christian Mishey #1 | 387 | Nov. 3, 1906 | | | | 605 | 407 | 223 | 154 | 108 | 100 | |
| J.K. Lauderbaugh #1 | 388 | Oct. 22, 1906 | | | | 446 | 276 | 188 | | | | Aband. |
| S. Weller #2 | 395 | Oct. 27, 1906 | | | | 416 | 261 | 191 | 119 | | | Aband. |
| D.C. Parrott #2 | 397 | Nov. 8, 1906 | | | | 418 | 278 | 200 | 146 | 126 | 117 | |
| Isaac Johnson #6 | 401 | Dec. 23, 1906 | | | | 585 | 330 | 201 | 132 | 110 | 96 | |
| Christian Mishey #2 | 402 | Dec. 24, 1906 | | | | 590 | 400 | 219 | 135 | 105 | 100 | |
| Henry Clemente #1 | 404 | Jan. 24, 1907 | | | | | 344 | 205 | 113 | 92 | 88 | |
| Rezin Welsh #2 | 414 | May 15, 1907 | | | | | 548 | 375 | 191 | | | Aband. |
| Christian Mishey #3 | 415 | May 16, 1907 | | | | | 345 | 221 | 139 | 108 | 105 | |
| Henry Clemente #2 | 423 | May 15, 1907 | | | | | | | | | | Effr |
| John B. Steinmetz #1 | 425 | May 28, 1907 | | | | | | | | | | Effr |
| A.J. Keys #1 | 439 | July 17, 1907 | | | | | | | | | | |
| J.K. Lauderbaugh #2 | 440 | July 20, 1907 | | | | | 395 | 280 | 163 | 126 | 111 | |
| W.J. Workman #1 | 482 | April 18, 1907 | | | | | 406 | 229 | 141 | 111 | 108 | |
| A.J. Keys #2 | 483 | Oct. 11, 1907 | | | | | 496 | 356 | 164 | 134 | 121 | |
| C.A. Lefever #1 | 508 | Jan. 25, 1908 | | | | | | 324 | 179 | 101 | 100 | |
| Geo. O'Daniel #1 | 562 | Sept. 3, 1908 | | | | | | 281 | 161 | | | |
| W.E. Twinen #2 | 581 | Oct. 2, 1908 | | | | | | 250 | 148 | 110 | | |

## EXHIBIT N SHEET 21

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

CARTER DISTRICT—LOGAN COUNTY

Average for 1907 - 474
" 1908 - 331
" 1909 - 347
" 1910 - 417
" 1911 - 348

11 Wells

Abandoned
By
Wells 1
10

Average for 1904 - 700
1905 - 559
1906 - 511
1907 - 331
1908 - 220
1909 - 134
1910 - 106
1911 - 99

Total 25

699

# EXHIBIT N SHEET 22

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

HARRISON TOWNSHIP---KNOX COUNTY

| Name of Lessor | Sec'l | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E.P. & F.R. Green #1 | 254 | March 8, 1905 | | | 547 | 408 | 246 | 233 | 182 | 157 | 151 | |
| " " " #2 | 238 | May 21, 1905 | | | 550 | 371 | 255 | 226 | 176 | 151 | 150 | |
| Elizabeth A. Doland #1 | 419 | March , 1907 (Pur.) | | | | | | | | | | |

Wells 3

Average for 1905 - 548
1906 - 389
1907 - 247
1908 - 229
1909 - 176
1910 - 152
1911 - 155

EXHIBIT N SHEET 23
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

PLEASANT TOWNSHIP---KNOX COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Ser'l No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F.J. Bell #1 | 237 | Nov. 5, 1904 | | 725 | 685 | 647 | 515 | 587 | 408 | 389 | 300 | |
| J.W. Forry #1 | 244 | Nov. 30, 1904 | | | | | | | | | | Dry |
| J.B. Watson #1 | 435 | June 19, 1907 | | | | | 650 | 804 | 120 | 108 | 108 | |
| " " #2 | 441 | July 20, 1907 | | | | | 684 | 837 | 207 | 170 | 143 | |
| W.T. Springer #1 | 443 | Aug. 3, 1907 | | | | | 647 | 415 | 239 | 175 | 155 | |
| Jacob Ash #1 | 450 | Jdly 22, 1907 | | | | | 599 | 244 | 134 | 96 | 52 | |
| J.B. Watson #3 | 461 | Sept. 7, 1907 | | | | | 523 | 379 | 170 | 112 | 95 | |
| " " #4 | 473 | Sept. 4, 1907 | | | | | 567 | 386 | 185 | | | |
| Jacob Ash #2 | 474 | Oct. 13, 1907 | | | | | 862 | 416 | 194 | 151 | 140 | |
| D.P. Campbell #8 | 479 | Oct. 8, 1907 | | | | | 620 | 447 | 216 | 132 | 113 | |
| David Watson #1 | 486 | Oct. 22, 1907 | | | | | 578 | 295 | 149 | 112 | 120 | |
| J.B. Watson #5 | 491 | Nov. 19, 1907 | | | | | 420 | 237 | 132 | | | Aband. Feb. 1911 |
| D.P. Campbell #9 | 504 | May 8, 1908 | | | | | | 480 | 293 | 152 | 135 | |
| J.B. Watson #6 | 507 | Dec. 6, 1907 | | | | | 412 | 232 | 138 | 95 | 85 | |
| F.E. & G. Vanaita #1 | 521 | July 26, 1908 | | | | | | 355 | 218 | | | |
| David Watson #2 | 523 | June 6, 1908 | | | | | | 296 | 167 | | | Aband. |
| D.P. Campbell #11 | 553 | July 8, 1908 | | | | | | 537 | 308 | 156 | | |
| P.E. Edmister #1 | 569 | Aug. 27, 1908 | | | | | | 348 | 186 | 116 | | |
| P.J. Bell #2 | 586 | Nov. 2, 1908 | | | | | | 495 | 419 | 365 | | |
| Alex. Debolt #1 | 596 | Oct. 16, 1908 (Pur.) | | | | | | 507 | 368 | 315 | 175 | |
| " " #3 | 597 | Nov. 19, 1908 | | | | | | 565 | 375 | 245 | 208 | |
| C.W. Forry et al #2 | 605 | Jan. 28, 1909 | | | | | | | 402 | 196 | 143 | |
| Alex. Debolt #4 | 607 | Feb. 8, 1909 | | | | | | | 490 | 318 | 280 | |
| C.W. Forry #3 | 614 | March 24, 1909 | | | | | | | 399 | 189 | 140 | |
| " " #4 | 625 | May 23, 1909 | | | | | | | 460 | 253 | | |
| Frank Shinnaberry #1 | 638 | July 3, 1909 | | | | | | | 490 | 346 | 256 | |
| Chas. B. Sheffer #1 | 648 | Aug. 8, 1909 | | | | | | | 600 | 352 | 300 | |

Dry 1
Abandoned 8
Wells 26
27

Average for 1904 - 725
1905 - 685
1906 - 647
1907 - 518
1908 - 380
1909 - 210
1910 - 205
1911 - 169

# EXHIBIT N SHEET 24

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

MILFORD TOWNSHIP---KNOX COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Serial No. | Completed | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hannah Crosby | 153 | Oct. 26, 1903 | | | 194 | | | | | | | Aband. July 31, 1906 |
| Lucinda Quick #1 | 184 | Jan. 8, 1904 | | 598 | 467 | 396 | 263 | 215 | 148 | 140 | | |
| W.C. Riley #1 | 189 | July 24, 1904 | | | 182 | 164 | 156 | 145 | 97 | 85 | | |
| " " #2 | 190 | Jan. 13, 1904 | | | 174 | 161 | 146 | 143 | 100 | 90 | | |
| W.C. Beaney #1 | 195 | July 2, 1904 | | 299 | 190 | 160 | 165 | 146 | 103 | 75 | | |
| " " #2 | 196 | Feb. 16, 1904 | | | 182 | 170 | 155 | 145 | 100 | 80 | | |
| Lew Robinson #1 | 397 | Sept. 27, 1905 | | | 595 | 456 | 281 | 167 | 94 | 85 | | |
| U.A. Watson #1 | 351 | July 20, 1905 | | | | 565 | 345 | 184 | 121 | 132 | | |
| " " #2 | 362 | Aug. 30, 1906 | | | | 571 | 406 | 224 | 136 | 89 | | |
| D.E. Chadwick #1 | 379 | Oct. 11, 1906 | | | | 342 | 277 | 190 | 107 | 80 | | |
| Lew Robinson #3 | 406 | Jan. 25, 1907 | | | | | 409 | 205 | 115 | 82 | | |
| B.B. Vanrhoden #1 | 409 | Jan. 17, 1907 | | | | | 437 | 221 | 106 | 75 | | |
| D.H. Speelman #1 | 420 | May 8, 1907 | | | | | 450 | 250 | 100 | 85 | | |
| Jos. M. Larimore #1 | 428 | June 5, 1907 | | | | | 450 | 230 | 107 | | | |
| Wm. Larimore #1 | 437 | June 13, 1907 | | | | | 485 | 270 | 97 | | | |
| Lew Robinson #4 | 448 | July 3, 1907 | | | | | 460 | 228 | 131 | 95 | | |
| D.E. Chadwick #2 | 451 | Sept. 16, 1907 | | | | | 254 | 224 | 127 | 85 | | |
| James Larimore #1 | 456 | July 20, 1907 | | | | | 475 | 246 | 87 | 75 | | |
| D.H. Speelman #2 | 459 | Aug. 2, 1907 | | | | | 475 | 311 | 141 | 95 | | |
| M.J. Burgeon #1 | 462 | Aug. 23, 1907 | | | | | 460 | 300 | 120 | | | Aband. Jan. 22, 1910 |
| Hattie Hollister #1 | 475 | Sept. 12, 1907 | | | | | 415 | 225 | 120 | | | Aband. Dec. 18, 1909 |
| M. Grandle #1 | 477 | Sept. 21, 1907 | | | | | | | | | | Dry |
| J.I. Kinsey #1 | 478 | Oct. 30, 1907 | | | | | 420 | 241 | 138 | 93 | | |
| David Coe #1 | 488 | Oct. 18, 1907 | | | | | 435 | 320 | 143 | 150 | | |
| Jennie Myers #1 | 497 | Nov. 19, 1907 | | | | | 430 | 282 | 95 | 85 | | |
| James Larimore #2 | 505 | Nov. 19, 1907 | | | | | 410 | 250 | 91 | 75 | | |
| Frank Perkins #1 | 522 | June 14, 1908 | | | | | | 275 | 98 | 78 | | |
| Ellen Shaffner #1 | 557 | July 10, 1908 | | | | | | 222 | 109 | 85 | | |
| M. Chrisman #1 | 558 | July 17, 1908 | | | | | | 300 | 152 | 110 | | |
| O.D. Chrisman #1 | 564 | Aug. 7, 1908 | | | | | | 270 | 99 | 75 | | |
| S. & J. Simons #1 | 571 | Sept. 1, 1908 | | | | | | | | | | Dry |
| David Hiebel #2 | 572 | Sept. 7, 1908 | | | | | | 240 | 112 | 95 | | |
| O.D. Chrisman #2 | 580 | Sept. 25, 1908 | | | | | | 260 | 104 | 80 | | |

Average for 1903 - 580
1904 - 448
1905 - 283
1906 - 331
1907 - 575
1908 - 237
1909 - 113
1910 - 90

| | |
|---|---|
| Dry | 5 |
| Abandoned | 3 |
| Wells | 25 |
| Total | 33 |

EXHIBIT N SHEET 25

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY.

MILLER TOWNSHIP---HOCK COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jane E. Weaver #1 | 74 | April 12, 1902 | 680 | 573 | 551 | 458 | 362 | 293 | 260 | 244 | 105 | |
| Rebecca Conaway #1 | 82 | July 12, 1902 | 660 | 407 | 476 | 430 | | | 290 | | | |
| Julia A. Barnhart #1 | 90 | Sept. 17, 1902 | 550 | 537 | 457 | 426 | 386 | 335 | 280 | 250 | | |
| Magdalena Weibel #1 | 96 | Jan. 12, 1903 | 503 | | 195 | 150 | 170 | | | | | Aband. June 5, 1908 |
| L.F. Hilyard #1 | 97 | Oct. 16, 1902 | 490 | | 211 | 148 | 132 | 124 | 91 | 80 | | |
| Sarah M. Drippe #1 | 103 | Nov. 6, 1902 | 660 | | 172 | 162 | 152 | 140 | 80 | 65 | | |
| Geo. W. Shuff #1 | 110 | Nov. 25, 1902 | 700 | 608 | 555 | 463 | 428 | 337 | 263 | 257 | | |
| L.F Hilliard #2 | 127 | Jan. 10, 1903 | 420 | | 209 | 162 | 142 | 143 | 112 | 80 | | |
| C.C. Baughman #1 | 129 | May 14, 1903 | 700 | 635 | 531 | 370 | 290 | 232 | 178 | 151 | | |
| James Thompson #1 | 131 | March 16, 1903 | 651 | 650 | 340 | 315 | 251 | 235 | 159 | 155 | | |
| A.G. Milligan #1 | 133 | March 3, 1903 | 400 | 300 | 277 | 181 | 174 | 142 | 90 | 80 | | |
| Magd. Weibel #2 | 134 | June 24, 1903 | 476 | 385 | 315 | 265 | 208 | | | | | Aband. June 22, 1908 |
| J.E. Johnson #1 | 140 | June 27, 1903 | 395 | 324 | 206 | 155 | 206 | | | | | Aband. July 9, 1908 |
| Mary A. Johnson #1 | 141 | July 31, 1903 | 462 | 239 | 187 | 181 | 159 | 156 | 108 | 85 | | |
| W.A. Chambers #1 | 142 | July 14, 1903 | | | | | | | | | | Dry Hole |
| A.S Poland #1 | 146 | Aug. 15, 1903 | | | 226 | 205 | 166 | 155 | 97 | 75 | | |
| A.G. Shutt #1 | 147 | Sept. 11, 1903 | 640 | | 239 | 199 | 145 | 142 | 95 | 85 | | |
| Wm. Campbell #1 | 148 | Aug. 8, 1903 | | | | | | | | | | Aband. April 9, 1904 |
| David Weibel #1 | 154 | Oct. 27, 1903 | 660 | 580 | 422 | 314 | 321 | 189 | 125 | 95 | | |
| Albert Bailey #1 | 161 | Oct. 21, 1903 | 610 | | 394 | 376 | 295 | | | | | |
| Chas. & Rolna Hall #1 | 164 | Oct. 8, 1903 | 500 | | 263 | 232 | 200 | | | | | Aband. Jan. 20, 1908 |
| S.B. & L.C. Vance #1 | 170 | Oct. 3, 1903 | | | | | | | | | | Dry Hole |
| Oscar Robinson #1 | 180 | Nov. 30, 1903 | | | | | | | | | | Dry Hole |
| Geo. & O. Robinson #1 | 181 | Dec. 18, 1903 | | | | | | | | | | Dry Hole |
| Daniel Fishburn #1 | 183 | May 29, 1904 | | 709 | 511 | 333 | 259 | 190 | 143 | 135 | | |
| A.S. Poland #2 | 183 | March 9, 1904 | | 425 | 261 | 177 | 160 | 155 | 100 | 95 | | |
| W.C. Beeney #1 | 195 | July 2, 1904 | | 299 | 202 | 190 | 175 | 146 | 102 | 75 | | |
| Sarah M. Dripps #2 | 194 | Feb. 7, 1904 | | | 170 | 156 | | | | | | Aband. May 13, 1907 |
| Caroline Miller #1 | 204 | April 26, 1904 | | 691 | 518 | 368 | | | | | | Aband. Sept. 19, 1908 |
| M. Rockwell #1 | 219 | July 21, 1904 | | 647 | 417 | 2237 | 174 | 160 | 128 | 103 | | |
| C. Brown #1 | 233 | Sept. 20, 1904 | | 718 | 478 | 325 | 248 | 192 | 152 | 109 | | |
| C. Hildreth #1 | 234 | Sept. 21, 1904 | | | | | | | | | | Dry Hole |
| J. Lohr #1 | 236 | Oct. 19, 1904 | | 675 | 500 | 282 | | | | | | Aband. Nov. 10, 1908 |
| C. Baughman #2 | 246 | Dec. 23, 1904 | | 570 | 500 | 322 | 231 | 182 | 142 | 135 | | |
| E.M. Morrison #1 | 250 | Dec. 10, 1904 | | 490 | 501 | 290 | 219 | 177 | 142 | 108 | | |
| W.D Chambers #1 | 251 | March 8, 1905 | | | 578 | 372 | 303 | 243 | 171 | 119 | | |

# EXHIBIT N SHEET 26

AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

Sheet 2

HILLAR TOWNSHIP---KNOX COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E. Rockwell | 255 | Jan. 31, 1905 | | | 433 | 254 | 199 | 177 | 137 | 121 | | |
| Jos. Lorh #2 | 256 | Feb. 5, 1905 | | | 604 | 325 | 190 | 130 | 125 | 100 | | |
| Joel H. Ward #1 | 259 | May 15, 1905 | | | 530 | 296 | 227 | 195 | 139 | 106 | | |
| T. Colopy #1 | 268 | May 31, 1905 | | | 543 | 313 | 218 | 186 | 142 | 114 | | |
| Wm. Chambers & O.W. Wormley | 269 | June 4, 1905 | | | 689 | 499 | 414 | 321 | 198 | 136 | | |
| S.T. Vanatta #1 | 271 | June 15, 1905 | | | 568 | 308 | 265 | 221 | 156 | 126 | | |
| S.T. Vanatta #2 | 277 | July 6, 1905 | | | 585 | 307 | 179 | 132 | 117 | 101 | 92 | |
| Timothy Colopy #2 | 278 | July 21, 1905 | | | 550 | 308 | 255 | 225 | 141 | 114 | | |
| Magd. Heibel #3 | 285 | Aug. 18, 1905 | | | 325 | 214 | 135 | 120 | | | | Aband. June 2,, 1908 |
| Isaac Stull #1 | 286 | Aug. 3, 1905 | | | 408 | 289 | 330 | 308 | 176 | | | |
| Douglas Buchey #1 | 288 | Aug. 10, 1905 | | | 571 | 239 | 152 | 102 | 104 | 106 | | |
| Mary Chambers et al #1 | 289 | Aug. 25, 1905 | | | 572 | 321 | 277 | 215 | 152 | 95 | | Aband. July 19, 1910 |
| S.T. Vanatta #3 | 290 | Sept. 19, 1905 | | | 625 | 352 | 182 | 165 | 115 | 89 | 91 | |
| W.D. Chambers #2 | 291 | Sept. 19' 1905 | | | 606 | 404 | 338 | 274 | 162 | 120 | | |
| M.C. Bone #1 | 293 | Sept. 13, 1905 | | | 719 | 486 | 271 | 195 | 159 | 139 | 137 | |
| M.C. Bone #2 | 293 | Sept. 20, 1905 | | | 624 | 361 | 223 | 168 | 136 | 110 | 96 | |
| Elis. Stevens #1 | 296 | Oct. 2, 1905 | | | 640 | 545 | 466 | 306 | 264 | 190 | | |
| V. Eagle #1 | 300 | Oct. 3, 1905 | | | 608 | 305 | 201 | 162 | 137 | 116 | 108 | |
| Douglas Bricker #2 | 302 | Oct. 19, 1905 | | | 540 | 279 | 178 | 142 | 120 | 106 | | |
| Isaac Johnson #4 | 304 | Nov. 1, 1905 | | | 708 | 595 | 454 | 301 | 135 | | | |
| F. Denison #1 | 306 | Nov. 10, 1905 | | | 680 | 380 | 208 | 161 | 116 | | | Aband. Dec. 31,1910 |
| F.C. Cunningham #1 | 307 | Nov. 1, 1905 | | | | | | | | | | Dry |
| Wm. Chambers #2 | 311 | Nov. 28, 1905 | | | | | | | | | | Dry |
| Wm. Elis. Stevens #2 | 313 | Nov. 17, 1905 | | | 545 | 560 | 360 | 330 | 279 | 219 | | |
| Lew Robinson #2 | 314 | Nov. 11, 1905 | | | 650 | 547 | 327 | 155 | 108 | | | |
| Grant Harris #1 | 315 | Dec. 17, 1905 | | | 527 | 402 | 291 | 240 | 178 | 148 | | |
| Geo. Nixon #1 | 317 | Dec. 6, 1905 | | | 650 | 598 | 390 | 295 | 263 | 185 | | |
| Douglas Bricker #3 | 319 | Dec. 3, 1905 | | | 520 | 276 | 172 | 153 | | | | Aband. March 24, 1909 |
| S.T. Vanatta #4 | 321 | Dec. 13, 1905 | | | 550 | 362 | 204 | 150 | | | | Aband. Sept.30, 1908 |
| J.B. Oldaker #1 | 326 | Jan. 25, 1906 | | | | 560 | 344 | 268 | 227 | 166 | | |
| M.C. Bone #3 | 327 | Feb. 21, 1906 | | | | 479 | 266 | 200 | 158 | 130 | 116 | |
| W.A. Skuff #1 | 331 | May 31, 1906 | | | | 462 | 263 | 190 | 156 | 139 | 139 | |
| Grant Harris #2 | 336 | May 31, 1906 | | | | 420 | 393 | 235 | 187 | 148 | | |
| Ross & W.P. Jennings #1 | 340 | July 14, 1906 | | | | 501 | 383 | 285 | 163 | 122 | | |
| Sally Simmons #2 | 364 | July 2, 1906 | | | | | | | | | | Dry Hole |
| Daniel Koute #1 | 347 | July 2, 1906 | | | | 481 | 275 | 184 | 138 | 118 | 110 | |
| J.W. & W.J. Smoots #1 | 354 | Oct. 29, 1906 | | | | 643 | 548 | 446 | 122 | | | Aband. Sept. 19,1910 |
| S.T. Vanatta #5 | 359 | Aug. 18, 1906 | | | | 277 | 180 | 140 | 85 | | | Aband. Jan. 10, 1911 |
| H. Weaver #1 | 364 | Aug. 24, 1906 | | | | 501 | 400 | 320 | 235 | 145 | | |

EXHIBIT N SHEET 27
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

Sheet 3

MILLER TOWNSHIP---KNOX COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R.O. & W.P. Jennings #2 | 367 | Sept. 24, 1906 | | | | 522 | 449 | 297 | 160 | 103 | | |
| R. Vanostrand #1 | 377 | Sept. 27, 1906 | | | | 381 | 185 | 138 | 99 | | | Aband. June 17, 1910 |
| Philo Higgins #1 | 392 | Nov. 24, 1906 | | | | 407 | 450 | 290 | 290 | 212 | | |
| Lewis Thompson #1 | 394 | Nov. 6, 1906 | | | | | | | | | | Aband. May 13, 1907 |
| Robert H. Smith #1 | 424 | May 22, 1907 | | | | | 621 | 384 | 187 | 143 | 123 | |
| Calvin Miller #2 | 468 | Sept. 19, 1907 | | | | | 395 | 265 | 158 | 138 | | |
| Robert H. Smith #2 | 493 | Nov. 10, 1907 | | | | | 530 | 334 | 152 | | | Aband. July 25, 1910 |
| Lewis Thompson #2 | 492 | Oct. 24, 1907 | | | | | 410 | 277 | 212 | 80 | | |
| Calvin Miller #3 | 495 | Dec. 19, 1907 | | | | | 405 | 268 | 220 | 156 | | |
| R.O. & W.P. Jennings #3 | 525 | July 15, 1908 | | | | | | 317 | 170 | 124 | 111 | |

| | |
|---|---|
| Abandoned | 18 |
| Dry Holes | 8 |
| Wells | 59 |
| Total | 85 |

Average for 1903 - 564
1904 - 523
1905 - 463
1906 - 349
1907 - 277
1908 - 217
1909 - 159
1910 - 128
1911 - 111

# EXHIBIT N SHEET 28

## AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

MORGAN TOWNSHIP---KNOX COUNTY

AVERAGE ROCK PRESSURE

| Name of Lessor | Ser'l No. | Completed | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S.H. Kirkpatrick #1 | 113 | Dec. 11, 1902 | 760 | 700 | 605 | 506 | 488 | 365 | 314 | 282 | 217 | | |
| D.J. Warner #1 | 137 | June 27, 1903 | | | 626 | 527 | 473 | 398 | 351 | 309 | 263 | | |
| Anna Shaw et al #1 | 155 | Aug. 21, 1903 | | | 630 | 465 | 383 | 356 | 331 | 277 | 119 | | |
| D.P Campbell #1 | 206 | May 14, 1904 | | | 744 | 545 | 454 | 302 | 305 | 241 | 183 | 183 | |
| Orin & Ida Bishop #1 | 212 | June 10, 1904 | | | 755 | 689 | 614 | 527 | 455 | | 295 | | |
| D.P. Campbell #2 | 213 | July 1, 1904 | | | 614 | 541 | 441 | 305 | 308 | 234 | 191 | 180 | |
| H.C. Bell #1 | 217 | July 2, 1904 | | | 658 | 535 | 475 | 445 | 294 | 264 | 178 | | |
| W.H. Sellers #1 | 225 | Aug. 14, 1904 | | | 610 | 416 | 395 | 240 | 219 | 173 | 156 | | |
| D.P. Campbell #3 | 226 | Sept. 30, 1904 | | | 695 | 682 | 624 | 407 | 332 | 426 | 336 | 276 | |
| W.H. Sellers #2 | 235 | Oct. 3, 1904 | | | 622 | 453 | 365 | 220 | 228 | 190 | 157 | 160 | |
| W.H. Sellers #3 | 243 | Nov. 12, 1904 | | | 625 | 455 | 355 | 206 | 205 | 175 | 142 | 130 | |
| D.P. Campbell #4 | 248 | Dec. 24, 1904 | | | 625 | 535 | 424 | 260 | 290 | 225 | 188 | 178 | |
| W.H. Sellers #4 | 253 | Jan. 7, 1905 | | | | 488 | 395 | | 290 | 203 | 172 | 171 | |
| J.T.,D.O.,J.C. Torrens #1 | 260 | March 24, 1905 | | | | 520 | 510 | 220 | 295 | | 200 | | |
| W.H. Sellers #5 | 261 | April 6, 1905 | | | | 512 | 440 | | | | | | Aband. June 10,1907 |
| D.P. Campbell #5 | 274 | July 8, 1905 | | | | 605 | 407 | 390 | 293 | 265 | 180 | 186 | |
| Theo. & I.W.Campbell #1 | 281 | Aug. 22, 1905 | | | | 637 | 492 | 352 | 261 | 228 | 173 | | |
| D.P. Campbell #6 | 282 | Oct. 13, 1905 | | | | 695 | 611 | 482 | 317 | 231 | 248 | 183 | |
| D.P. Campbell #7 | 295 | Oct. 18, 1905 | | | | 533 | 520 | 396 | 341 | 289 | 246 | 235 | |
| C. Garrison #1 | 301 | Oct. 31, 1905 | | | | 725 | 534 | 305 | 216 | 184 | 145 | | |
| S.H. Kirkpatrick #2 | 303 | Oct. 13, 1905 | | | | 575 | 519 | 378 | 324 | 257 | 232 | | |
| C.H. Tulloss #1 | 309 | Dec. 5, 1905 | | | | 700 | 573 | 450 | 388 | 337 | 297 | | |
| C.W. Stevens #1 | 310 | Nov. 29, 1905 | | | | 700 | 567 | 397 | 289 | 246 | 194 | | |
| Theo. & J.W. Campbell #2 | 316 | Dec. 22, 1905 | | | | 700 | 501 | | 245 | 218 | | | Aband. Aug. 10, 1909 |
| C.E. Campbell #1 | 333 | Jan. 24, 1906 | | | | | 570 | 310 | 207 | 160 | 100 | | |
| P.H. Lohr #1 | 330 | March 24, 1906 | | | | | 512 | | | | | | Aband. Dec.19, 1907 |
| J.J. Tulloss et al #1 | 335 | June 7, 1906 | | | | | 675 | | 284 | 285 | 253 | 200 | |
| J.E. Woodruff #1 | 342 | July 13, 1906 | | | | | 675 | 515 | 383 | 279 | 198 | 196 | |
| M.M. & M.C. Lafever #1 | 352 | Aug. 14, 1906 | | | | | 664 | 538 | 457 | 389 | 301 | 215 | |
| C.E. Campbell #2 | 353 | Aug. 7, 1906 | | | | | 541 | 320 | 216 | 191 | 132 | | |
| Jno.F. & L. Woodruff #2 | 371 | Sept. 14, 1906 | | | | | 625 | 475 | 270 | 197 | 152 | 136 | |
| W.L. Sperry #1 | 375 | Sept. 26, 1906 | | | | | 501 | 455 | 294 | 256 | 161 | | |
| E.J. Campbell #2 | 386 | Nov. 6, 1906 | | | | | 500 | 541 | 473 | 317 | 240 | 218 | |
| Caroline Honey #1 | 411 | July 1, 1907 | | | | | | 425 | 284 | 196 | 152 | 143 | |
| Margaret Campbell #2 | 416 | May 18, 1907 | | | | | | 620 | 458 | 370 | 297 | 228 | |
| J.F. Woodruff #3 | 434 | July 22, 1907 | | | | | | 390 | 339 | 240 | | | |
| W.D. Clutter #1 | 436 | July 5, 1907 | | | | | | 740 | 597 | 390 | 283 | 233 | |
| Sarah A. Smith #1 | 444 | Aug. 24, 1907 | | | | | | 510 | 390 | | 200 | | |

Sheet 2

NEWARK TOWNSHIP——KNOX COUNTY

| Name of Lessor | Ser'l No. | Completed | AVERAGE ROCK PRESSURE 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D.P. Clutter #1 | 456 | Aug. 30, 1907 | | | | | | 540 | 453 | 335 | 244 | 206 | |
| W.D. Clutter #2 | 463 | Sept. 21, 1907 | | | | | | 660 | 531 | 361 | 236 | 195 | |
| J.J. Tullose #2 | 465 | Sept. 25, 1907 | | | | | | 500 | 405 | 360 | 246 | 160 | |
| E.J. Campbell #3 | 481 | Oct. 8, 1907 | | | | | | 525 | 467 | 384 | 250 | 235 | |
| Cinderella Clutter #6 | 490 | Nov. 2, 1907 | | | | | | 575 | 457 | 309 | 208 | 178 | |
| J.T. Torrens et al #2 | 496 | Dec. 19, 1907 | | | | | | | 331 | 267 | 113 | | |
| W.D. Clutter #3 | 500 | Nov. 22, 1907 | | | | | | 695 | 671 | 314 | 187 | 167 | |
| Rachel Bell et al #1 | 516 | May 18, 1908 | | | | | | | 580 | | | | Aband. June 19, 1910 |
| John Hickinbothem #2 | 517 | Nov. 17, 1908 | | | | | | | 357 | 328 | 261 | 225 | |
| W.D. Clutter #4 | 551 | Aug. 11, 1908 | | | | | | | 627 | 358 | 198 | 163 | |
| Rachel Bell #2 | 578 | Jan. 10, 1909 | | | | | | | | 505 | | | Aband. May 7, 1909 |
| W.D. Clutter #5 | 590 | Nov. 24, 1908 | | | | | | | 610 | 388 | 246 | 178 | |
| W.D. Clutter #6 | 600 | Dec. 8, 1908 | | | | | | | 605 | 371 | 201 | 158 | |
| W.D. Clutter #7 | 606 | Jan. 30, 1909 | | | | | | | | 362 | 198 | 165 | |
| G.H. Sellers et al #1 | 618 | March 13, 1909 | | | | | | | | 155 | 153 | | Purchased |
| James Bell #1 | 622 | May 17, 1909 | | | | | | | | 335 | 200 | | |
| H.J. Bell #1 | 623 | May 18, 1909 | | | | | | | | 418 | 260 | 200 | |
| J.F. Wodruff #4 | 626 | Aug. 10, 1909 | | | | | | | | 315 | | | Aband. Dec. 15, 1910 |
| Robt. McFarland #1 | 633 | June 16, 1909 | | | | | | | | 322 | 255 | | |
| H.J. Bell #2 | 634 | July 3, 1909 | | | | | | | | 385 | | | Aband. Aug. 15, 1910 |
| G. Travel #1 | 644 | July 17, 1909 | | | | | | | | 432 | 330 | | |
| John Harvey #1 | 649 | July 26, 1909 | | | | | | | | 335 | 298 | | |
| R.L. Jones #1 | 675 | Oct. 23, 1909 | | | | | | | | 600 | 424 | | |
| Peter Van Winkle #1 | 775 | July 27, 1910 | | | | | | | | | 651 | 480 | |

Average for 1902 - 760
1903 - 700
1904 - 650
1905 @ 570
1906 @ 510
1907 - 489
1908 - 368
1909 - 299
1910 - 224
1911 - 198

Wells 55
Abandoned 7
Total 62

EXHIBIT N SHEET 29
AVERAGE ROCK PRESSURE DATA PERTAINING TO LOGAN NATURAL GAS AND FUEL COMPANY

EXHIBIT O-1 SHEET 1

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, APRIL 1910

# WELL RECORD REPORT

NORTH FIELD — HENRINGTON TWP. — APRIL 1910.

| Well No. | Name | Acres | When Drilled | Pressures Apr. 09 L | R | Sept. 09 L | R | Apr. 10 L | R | Capacities April 1909 Open Flow | Sept. 1909 Open Flow | April 1910 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | D. L. Van Fossen | 293 | Jan 05 | | 115 | 110 | 115 | 30 | 85 | 129,800 | 156,830 | 121,260 | 87,670 | 39,210 | Wet and salty |
| 2 | D. L. Van Fossen | | Nov. 06 | | 110 | 110 | 110 | 25 | 90 | 110,880 | 64,159 | 30,270 | 46,266 | 27,720 | Wet, in fair condition |
| 1 | C. Dixon | 4 | Jun 05 | | 80 | 110 | 120 | 30 | 95 | 1,100,000 | 236,444 | 170,946 | 36,226 | 16,682 | Weak |
| 1 | E. Dumbauld | 188 | Jan 05 | | 150 | 120 | 145 | 65 | 130 | 76,310 | 67,910 | 44,302 | 44,302 | 39,210 | Wet, in fair condition |
| 2 | E. Dumbauld | | Apr 05 | 50 | 140 | 120 | 135 | 45 | 120 | 350,670 | 343,266 | 280,034 | 321,060 | 236,444 | Dry, in fair condition |
| 3 | E. Dumbauld | | Jan 06 | 55 | 160 | 120 | 150 | 70 | 135 | 121,080 | 97,400 | 27,720 | 52,416 | 24,600 | Wet, in fair condition |
| 2 | E. O. Squires | 81 | Oct 06 | 55 | 150 | 140 | 115 | 45 | 110 | 271,630 | 67,910 | 48,030 | 110,860 | 70,260 | Wet and salty |
| 3 | E. O. Squires | | Dec 08 | | 125 | 140 | 110 | 40 | 85 | 97,400 | 95,585 | 62,882 | 23,370 | 12,000 | In bad condition |
| 1 | W. D. McClintick | 54 | May 07 | | 135 | 150 | 150 | 45 | 100 | 121,060 | 110,880 | 70,260 | 39,210 | 17,560 | Wet, in bad condition |
| 2 | H. Shipley | 107 | Aug 07 | | 155 | 125 | 145 | 35 | 120 | 231,416 | 288,438 | 231,416 | 226,388 | 163,888 | In good condition |
| 1 | R. G. Hoover | 152 | Jul 07 | | 145 | 110 | 130 | 30 | 115 | 110,880 | 40,974 | 27,720 | 39,210 | 30,270 | Wet and salty |
| 2 | W. Hawkins | 400 | Sep 08 | | 140 | 100 | 115 | 50 | 90 | 578,244 | 170,946 | 85,940 | 110,332 | 52,416 | Wet, in fair condition |
| 1 | C. G. Houck | 127 | Jul 07 | | 150 | 105 | 135 | 45 | 115 | 67,910 | 55,340 | 30,270 | 37,060 | 27,720 | Wet and salty |
| 1 | Mrs. Larimore | 35 | Feb 08 | | 165 | 115 | 135 | 40 | 115 | 673,040 | 226,388 | 178,004 | 156,850 | 97,400 | In fair condition |
| 1 | W. H. Douglas | 16 | Oct 08 | | 160 | 115 | 135 | 46 | 110 | 800,972 | 447,800 | 391,825 | 271,630 | 170,946 | In fair condition |
| 1 | W. H. Douglas | 50 | Jul 09 | | | 100 | 270 | 45 | 190 | | 121,260 | 85,940 | 121,080 | 85,940 | In fair condition |
| 1 | Meachem Heirs | 2 | Dec 08 | | 400 | 100 | 325 | 40 | 200 | 190,000 | 131,260 | 97,400 | 33,914 | 64,139 | In fair condition |
| | TOTAL HENRINGTON TOWNSHIP | | | | | | | | | 4,566,677 | 2,953,580 | 2,073,935 | 1,808,117 | 1,176,405 | |

# EXHIBIT O-1 SHEET 2

## GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. APRIL 1910

WELL RECORD REPORT

APRIL 1910.

NORTH FIELD — BURLINGTON TWP.

| Well No. | Name | Acres | When Drilled | Apr. 09 L | Apr. 09 R | Sept. 09 L | Sept. 09 R | Apr. 10 L | Apr. 10 R | April 1909 Open Flow | Sept. 1909 Open Flow | Sept. 1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | C. Stinson | 80 | | | 250 | 100 | 225 | 55 | 195 | 245,366 | 232,160 | 288,438 | 221,360 | 170,946 | Very wet |
| 1 | J. Dunlap | 155 | | | 220 | 98 | 215 | 53 | 175 | 221,360 | 160,320 | 97,000 | 121,000 | 85,940 | Wet and salty |
| 1 | O. Dunlap | 78 | | | 205 | 105 | 180 | 75 | 165 | 394,986 | 246,500 | 221,360 | 338,740 | 221,416 | Dry, in good condition |
| 1 | A. Channell | 142 | | | 185 | 225 | 95 | 210 | 60 | 175 | 156,830 | 160,320 | 221,360 | 170,946 | 121,260 | Wet and salty |
| 1 | A. J. Wilson | 40 | | | 90 | 225 | 105 | 225 | 50 | 160 | 110,767 | 192,120 | 156,830 | 163,068 | 97,000 | In good condition |
| 1 | A. J. Wilson | 40 | Jan 04 | | 85 | 270 | 40 | 220 | 40 | 175 | 241,472 | 192,120 | 139,600 | 189,600 | 97,000 | Wet and salty |
| 1 | A. Paton | 60 | | | 120 | 200 | 95 | 185 | 35 | 160 | 119,455 | 48,080 | 39,210 | 39,210 | 24,000 | Wet, in bad condition |
| 1 | J. Paton | 112 | | | | 230 | 45 | 210 | 40 | 170 | 311,908 | 241,472 | 97,000 | 241,472 | 192,120 | Very wet and salty |
| 1 | H. Bush | 16 | | | 70 | 300 | 105 | 205 | 50 | 215 | 313,660 | 221,360 | 192,120 | 121,000 | 97,000 | In good condition |
| 1 | J. Beatty | 96 | | | 130 | 140 | 90 | 120 | 40 | 90 | 136,288 | 78,410 | 55,340 | 67,670 | 61,625 | Very wet |
| 1 | H. Boyd (Edman) | 128 | | Sep 03 | 110 | 245 | 115 | 165 | 45 | 170 | 150,000 | 148,320 | 70,260 | 20,404 | 11,771 | Very wet and weak |
| 1 | H. Boyd (Edman) | 120 | | Oct 03 | | 200 | 95 | 145 | 45 | 120 | 156,830 | 192,120 | 156,830 | 170,946 | 97,000 | In fair condition |
| 1 | W. Edman | 44 | | Sep 03 | 115 | 195 | 100 | 165 | 50 | 150 | 673,640 | 405,540 | 314,000 | 345,072 | 215,460 | In fair condition |
| 1 | H.A.Adams | 120 | | Oct 03 | 70 | 260 | 110 | 200 | 60 | 240 | 241,472 | 139,800 | 121,080 | 203,516 | 156,650 | In fair condition |
| 1 | H.McNaughton | 114 | | Mar 04 | | 240 | 110 | 200 | 60 | 210 | 127,977 | 170,946 | 139,800 | 110,880 | 70,260 | Wet, in bad condition |
| 1 | Wm. Reisinger | 50 | | Aug 04 | 80 | 325 | 45 | 310 | 40 | 235 | 97,000 | 83,040 | 58,415 | 67,670 | 78,410 | Wet, in fair condition |
| 1 | J.H.Conard | 208 | | Jul 05 | | 270 | 120 | 230 | 35 | 260 | 625,642 | 197,948 | 163,688 | 477,820 | 405,540 | Revived recently |
| 1 | Wm.Williams | 75 | | Jun 04 | 65 | 280 | 110 | 235 | 50 | 265 | 271,630 | 139,800 | 110,880 | 197,948 | 139,800 | Wet, in fair condition |
| 1 | O.Householder | 54 | | Jul 04 | | 170 | 60 | 180 | 40 | 140 | 271,630 | 215,512 | 97,000 | 221,360 | 163,688 | Wet, in fair condition |
| 1 | O.Householder | 84 | | Aug 04 | 55 | 165 | 60 | 170 | 40 | 140 | 170,946 | 139,800 | 65,940 | 131,260 | 85,940 | Wet, in fair condition |
| 1 | J.Williams | 186 | | Oct 07 | 65 | 330 | 105 | 325 | 40 | 245 | 313,660 | 156,830 | 131,260 | 185,062 | 139,800 | Dry, in fair condition |
| 1 | J.Williams | 78 | | Jan 08 | | 370 | 40 | 340 | 60 | 245 | 625,444 | 892,044 | 775,000 | 288,438 | 261,576 | Dry |
| 1 | H.Rice | | | Oct 08 | 145 | | | 535 | 45 | 400 | 516,500 | 803,443 | 802,217 | 696,740 | 578,244 | Dry and salty |
| 1 | H.Rice | | | Sep 09 | | | | 670 | 45 | 345 | | 803,443 | 800,972 | 696,740 | 545,072 | In good condition |
| 1 | C.H.Haa | 197 | | Feb 09 | 70 | 350 | 30 | 370 | 60 | 225 | 236,556 | 626,000 | 545,072 | 221,360 | 197,948 | In fair condition |
| 1 | Mrs.Mc.Kelf | 43 | | Apr 09 | | 700 | 120 | 560 | 60 | 310 | 1,500,000 | 1,744,800 | 1,730,688 | 637,000 | 477,820 | In good condition |
| 1 | Mrs.Mc.Kelf | | | Sep 09 | | | | 615 | 70 | 370 | | 661,740 | | 221,360 | 170,946 | Wet and salty |
| 1 | Wm.Williams | | | Sep 09 | | | | | 70 | 255 | | 97,000 | | 209,216 | 170,946 | Wet and salty |
| 1 | J.H.Haa | 44 | | Sep 09 | | | | | 70 | 285 | | 110,880 | | 55,340 | 44,598 | In fair condition |
| | | | | TOTAL BURLINGTON TOWNSHIP | | | | | | 8,289,437 | 9,651,844 | 7,533,861 | 7,004,221 | 5,800,452 | |

**EXHIBIT O-1 SHEET 3**

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, APRIL 1910

# WELL RECORD REPORT

NORTH FIELD — McKEAN TWP. — APRIL 1910

| Well No. | Name | Acres | When Drilled | PRESSURES Apr. 09 L | PRESSURES Apr. 09 R | PRESSURES Sept. 09 L | PRESSURES Sept. 09 R | PRESSURES Apr. 10 L | PRESSURES Apr. 10 R | April 1909 Open Flow | CAPACITIES Sept. 1909 Open Flow | CAPACITIES Sept. 09 50# Serv. | CAPACITIES April 1910 Open Flow | CAPACITIES April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S. S. Sweeney | 100 | Feb 06 | 200 | 475 | 160 | 505 | 45 | 460 | 1,480,000 | 873,844 | 836,462 | 1,216,000 | 1,130,000 | In good conditiontion |
| 2 | S.& H.Sweeny | 127 | Jun 06 | 235 | 500 | 110 | 525 | 105 | 410 | 344,350 | 231,416 | 226,388 | 209,664 | 192,120 | In good conditiontion |
| 1 | D.& H.Sweey | 109 | Jul 06 | 175 | 525 | 160 | 585 | 95 | 530 | 344,350 | 215,512 | 209,664 | 296,844 | 856,552 | In good conditiontion |
| 1 | E. L. Jones | 233 | Aug 06 | | 575 | 170 | 280 | 230 | 300 | 505,920 | 261,578 | 226,388 | 332,160 | 381,048 | In good conditiontion |
| 2 | E. L. Jones | | Feb 07 | 190 | 410 | 140 | 380 | 225 | 310 | 370,000 | 226,388 | 203,816 | 178,004 | 139,800 | In fair conditiontion |
| 3 | E. L. Jones | | Mar 07 | 145 | 450 | 140 | 445 | 150 | 255 | 585,970 | 511,908 | 443,068 | 301,048 | 251,526 | In fair conditiontion |
| 1 | M. Moller | 100 | Sep 06 | 230 | 660 | 135 | 650 | 65 | 630 | 344,350 | 382,340 | 272,843 | 324,760 | 241,472 | Dry,in good condition |
| 1 | F. M. Brooks | 69 | Oct 06 | 196 | 445 | 140 | 410 | 225 | 240 | 675,000 | 511,908 | 443,068 | 324,760 | 301,048 | Wet,in fair condition |
| 2 | F. M. Brooks | 186 | Nov 06 | | 325 | 170 | 285 | 225 | 260 | 584,850 | 376,009 | 339,566 | 311,908 | 443,068 | In good conditiontion |
| 3 | F. M. Brooks | | Apr 07 | 180 | 300 | 205 | 255 | 190 | 220 | 1,266,000 | 625,642 | 545,072 | 301,048 | 251,526 | Dry,in fair condition |
| 4 | F. M. Brooks | | Mar 08 | | 265 | 205 | 240 | 190 | 210 | 285,150 | 292,640 | 271,630 | 271,630 | 231,416 | Dry,in fair condition |
| 1 | F. C. Smith | 50 | Dec 06 | 175 | 495 | 140 | 490 | 105 | 350 | 699,225 | 443,068 | 405,560 | 416,000 | 350,670 | Wet,in fair condition |
| 1 | J. F. Moller | 98 | Jun 07 | | 400 | 175 | 360 | 100 | 300 | 146,220 | 74,210 | 65,396 | 70,410 | 55,340 | Wet,in fair condition |
| 1 | C. B. Cramer (Smith) | 114 | Jun 07 | 150 | 450 | 180 | 430 | 180 | 360 | 185,062 | 156,830 | 131,260 | 101,917 | 82,966 | Wet,in fair condition |
| 1 | J.B.Smith | 101 | Jul 07 | | 200 | 180 | 225 | 170 | 205 | 611,305 | 819,217 | 717,586 | 315,660 | 284,234 | Wet and salty |
| 1 | Mrs. D.M.Brooks | 32 | Aug 07 | | 200 | 140 | 190 | 100 | 175 | 123,000 | 30,270 | 24,600 | 52,416 | 46,286 | Wet,in fair condition |
| 1 | Mrs. M. E. Downer | 142 | Aug 07 | 195 | 320 | 130 | 315 | 105 | 260 | 393,000 | 284,236 | 271,630 | 148,320 | 121,260 | Dry,in good condition |
| 2 | Mrs. M. E. Downer | | Oct 07 | 200 | 460 | 120 | 410 | 100 | 370 | 664,840 | 131,260 | 110,860 | 388,663 | 357,007 | Dry,salty,infair cond- |
| 3 | Mrs. M. E. Downer | | Dec 07 | 190 | 475 | 110 | 465 | 100 | 400 | 271,630 | 121,080 | 97,400 | 148,320 | 121,080 | Wet,in fair condition |
| 1 | T. M. Brooks | 40 | Nov 07 | | 375 | 140 | 350 | 100 | 280 | 807,200 | 477,820 | 443,068 | 409,699 | 591,525 | Very wet |
| 1 | Mrs. J. M. Brister | 42 | Dec 07 | | 290 | 180 | 265 | 140 | 230 | 807,200 | 625,642 | 578,244 | 477,820 | 405,560 | Wet and salty |
| 1 | J. Wince | 200 | Jun 06 | 100 | 460 | | 540 | 60 | 370 | 247,840 | 376,009 | 357,007 | 321,060 | 284,552 | Wet,in fair condition |
| 2 | J. Wince | | May 08 | | | | 610 | 50 | 436 | | 301,048 | 296,844 | 321,060 | 309,456 | Dry,in good condition |
| 3 | J. Wince | | Oct 09 | | | | | 70 | 490 | | | | 995,000 | 836,500 | Dry,salty,in fair cond- |
| 1 | G. W. Davis | 75 | Nov 08 | 180 | 665 | 150 | 680 | 180 | 580 | 221,416 | 215,512 | 203,016 | 139,800 | 121,080 | Dry,in good condition |
| 1 | D. Allender (Bush) | 105 | Sep 09 | | | | 715 | 50 | 440 | | 855,626 | 800,972 | 618,244 | 511,908 | Dry,in good condition |
| 2 | D. Allender (Bush) | | Apr 10 | | | | | | FIRE | | | | 209,664 | 175,000 | In good conditiontion |
| 1 | E. Belt | 38 | Nov 09 | | | | | 40 | 430 | | | | 221,360 | 192,120 | Dry,in good condition |
| 2 | E. Belt | | Dec 09 | | | | | 60 | 415 | | | | 711,400 | 648,000 | Dry,in good condition |
| 3 | E. Belt | | | | | | | | | | | | (661,740) | | (Drilled in May 14 th) |
| 1 | C. Houck | 100 | Oct 09 | | | | | | 400 | | | | 185,052 | 156,830 | Fair cond.,not in line |
| 1 | J. Jordan | 65 | Mar 10 | | | | | | 505 | | | | 875,000 | 780,000 | Dry,gd. " . " " |
| 2 | J. Jordan | | | | | | | | | | | | | | Drilling |
| | TOTAL McKEAN TOWNSHIP | | | | | | | | | 11,953,888 | 9,420,013 | 8,628,226 | 11,396,456 | 9,954,232 | |

EXHIBIT O-1 SHEET 4

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, APRIL, 1910

# WELL RECORD REPORT

NORTH FIELD — GRANVILLE TWP. — APRIL 1910

| Well No. | Name | Acres | When Drilled | PRESSURES Apr. 09 L | R | Sept.09 L | R | Apr.10 L | R | CAPACITIES April 1909 Open Flow | Sept. 1909 Open Flow | Sept. 1909 50# Serv. | April 1910 Open Flow. | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J. Ransower | 100 | Jul 07 | 90 | 250 | 125 | 300 | 160 | 195 | 139,800 | 50,954 | 40,974 | 131,260 | 110,880 | Very wet |
| 2 | J. Ransower | | Oct 07 | 85 | 245 | 95 | 240 | 166 | 150 | 139,800 | 67,910 | 49,492 | 57,894 | 42,738 | In fair condition |
| 1 | J. Warner | 105 | Nov 07 | 125 | 260 | 70 | 240 | 215 | 190 | 197,968 | 118,880 | 97,400 | 95,585 | 87,670 | In good condition |
| 2 | J. Warner | | Dec 07 | 105 | 280 | 70 | 245 | 180 | 185 | 241,472 | 139,800 | 121,080 | | | Very weak,in bad cond. |
| 1 | Wm Owens | 113 | Jan 08 | 180 | 300 | 220 | 270 | 160 | 240 | 577,620 | 578,246 | 511,906 | 382,340 | 313,660 | Wet,infair condition |
| 1 | O. Miller | 100 | Feb 08 | 95 | 365 | 170 | 300 | 80 | 290 | 415,270 | 148,320 | 121,880 | 131,260 | 110,880 | Wet,in fair condition |
| 1 | Kate Fence | 50 | Apr 08 | | 295 | 220 | 265 | 190 | 225 | 285,180 | 324,760 | 280,084 | 185,062 | 163,888 | Wet,in good condition |
| 2 | Kate Fence | 70 | Aug 08 | | 290 | 220 | 260 | 190 | 215 | 436,200 | 477,820 | 443,068 | 156,830 | 121,080 | Very wet,in poor cond. |
| 1 | D.R. Owens | 22 | Jun 08 | | 285 | 100 | 270 | 185 | 240 | 103,500 | 131,260 | 68,940 | 87,670 | 78,410 | Very wet,in fair cond. |
| 2 | D.R. Owens | | Sep 08 | 75 | 365 | 100 | 340 | 185 | 285 | 456,200 | 372,843 | 321,060 | 445,200 | 357,007 | Dry, in good condition |
| 1 | W. Crooks | 100 | Jul 08 | 90 | 360 | 75 | 290 | 185 | 235 | 344,350 | 251,526 | 215,512 | 305,816 | 270,946 | Wet, in fair condition |
| 2 | W. Crooks | | Oct 09 | | | | | 145 | 515 | | | | 376,009 | 343,266 | Dry, in good condition |
| 1 | W. Goodrich | 200 | Jul 08 | 70 | 500 | 135 | 410 | 140 | 350 | 638,340 | 353,838 | 305,252 | 391,825 | 353,838 | Wet & Salty,fair cond. |
| 2 | W. Goodrich | | Nov 09 | | | | | 105 | 415 | | | | 343,266 | 266,604 | Dry, in good condition |
| 1 | T. Richards | 200 | Jul 09 | | | | 695 | 150 | 570 | | 1,684,800 | 1,744,800 | 860,000 | 740,000 | Dry, in good condition |
| 1 | W. H. Wilson | 92 | Nov 09 | | | | | 165 | 685 | | | | 479,000 | 391,825 | |
| | | | TOTAL GRANVILLE TOWNSHIP | | | | | | | 3,970,650 | 4,832,956 | 4,337,600 | 4,326,977 | 3,652,692 | |

# EXHIBIT O-1 SHEET 5

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, APRIL 1910

## WELL RECORD REPORT

NORTH FIELD — WASHINGTON TWP. — APRIL 1910

| Well No. | Name | Acres | When Drilled | PRESSURES Apr. 09 L | R | Sept.09 L | R | Apr. 10 L | R | CAPACITIES April 1909 Open Flow | Sept. 1909 Open Flow | Sept.1909 SO# Serv. | April 1910 Open Flow | April 1910 SO# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Wm Vance | 1 | 02 | | 190 | 120 | 190 | 45 | 150 | 127,977 | 163,888 | 110,880 | 110,880 | 70,260 | Dry,in good conditio n |
| 2 | Wm Vance | 1 | 06 | | 175 | 120 | 190 | 40 | 150 | 150,000 | 131,260 | 30,870 | 110,880 | 65,940 | In fair condition |
| 1 | W.W.Reynolds | 80 | May 08 | 90 | 385 | 110 | 300 | 40 | 220 | 67,000 | 48,080 | 34,950 | 39,216 | 21,480 | Wet,in bad condition |
| 1 | A.J. Stanton | 5 | Jun 08 | 65 | 206 | 105 | 300 | 45 | 240 | 90,931 | 131,260 | 110,080 | 121,080 | 97,400 | In good condition |
| 1 | B.Williams | 260 | Mar 05 | | 425 | 60 | 390 | 40 | 315 | 271,630 | 511,908 | 405,560 | 271,630 | 221,360 | In good condition |
| 2 | B. Williams | | Sep 05 | | 540 | 60 | 400 | 70 | 375 | 245,586 | 391,825 | 360,175 | 170,946 | 148,320 | Wet,in fair condition |
| 1 | H.Bell | 110 | Apr 05 | 65 | 260 | 95 | 325 | 75 | 185 | 110,767 | 139,800 | 121,080 | 261,578 | 221,360 | In fair cond.,,shows oil |
| 1 | Chas.Roberts | 132 | Aug 08 | 70 | 400 | 70 | 345 | 70 | 270 | 271,630 | 477,820 | 314,000 | 382,340 | 528,460 | Dry,salty,in faircond. |
| 2 | Chas.Roberts | | Aug 08 | | 450 | 70 | 420 | 70 | 355 | 278,716 | 305,252 | 261,578 | 131,260 | 85,940 | Wet,salty,in fair cond. |
| 3 | Chas.Roberts | | Jul 09 | | | | 500 | 110 | 345 | | 2,700,000 | | 982,344 | 907,000 | Dry,salty,in fair cond. |
| 1 | S.L.Haas | 115 | Dec 08 | 60 | 500 | 100 | 540 | 70 | 365 | 874,644 | 1,256,064 | 1,730,662 | 716,000 | 576,344 | Dry,salty,in fair cond. |
| 2 | S.L.Haas | | Feb 09 | 75 | 520 | 100 | 565 | 60 | 420 | 800,972 | 1,266,000 | 1,166,000 | 756,000 | 648,000 | Dry,in good condition |
| 3 | S.L.Haas | | Mar 09 | | 700 | 105 | 570 | 65 | 360 | 719,586 | 760,000 | 696,740 | 366,512 | 221,360 | Dry,in good condition |
| 4 | S.L.Haas | | May 09 | | | 105 | 615 | 60 | 468 | | 511,908 | 405,560 | 309,456 | 256,552 | Dry,in good condition |
| 5 | S.L.Haas | | Jun 09 | | | | 698 | 60 | 495 | | 313,660 | 296,844 | 236,444 | 215,512 | Wet,in fair condition |
| 1 | D.Erwin | 33 | Aug 09 | | | | 750 | 55 | 515 | | 1,744,800 | 1,578,000 | 1,117,000 | 1,034,000 | Dry,in good condition |
| 2 | D.Erwin | | Dec 09 | | | | | 88 | 525 | | | | 1,980,000 | 1,744,800 | Dry,in good condition |
| 1 | J & S Haas | 99 | Oct 09 | | | | | 65 | 375 | | | | 350,070 | 305,262 | Dry,in good condition |
| 2 | J & S Haas | | Dec 09 | | | | | 65 | 365 | | | | 284,236 | 241,472 | Wet and salty. |
| 1 | A.J.Wilson | 564 | Feb 10 | | | | | 60 | 515 | | | | 197,968 | 156,830 | Dry,salty,in faircond. |
| | | | TOTAL WASHINGTON TOWNSHIP | | | | | | | 4,191,465 | 10,653,475 | 7,617,145 | 8,896,455 | 7,589,642 | |

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EXHIBIT O-1 SHEET 6

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. APRIL 1910

# WELL RECORD REPORT

NORTH FIELD — LIBERTY TWP. — APRIL 1910

| Well No. | Name | Acres | When Drilled | Pressures Apr.09 L | R | Sept.09 L | R | Apr.10 L | R | April 1909 Open Flow | Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | P.J.Brooks | 175 | Mar 05 | 195 | 30 | 200 | | 135 | 180 | 34,210 | 70,260 | 55,340 | 55,340 | 34,950 | Dry,in fair condition |
| 2 | P.J.Brooks | | May 05 | 220 | 30 | 230 | | 135 | 220 | 165,888 | 121,080 | 97,400 | 170,946 | 148,320 | Wet,in fair condition |
| 1 | J.L.Belt | 50 | Sep 05 | 160 | 120 | 150 | | 65 | 140 | 97,400 | 55,340 | 12,390 | 17,360 | 10,000 | In bad condition |
| 2 | C.Slife | 191 | Jan 07 | 280 | 120 | 270 | | 150 | 240 | 218,660 | 198,120 | 148,320 | 178,004 | 165,888 | Wet,in fair condition |
| 1 | W.A.Barber | 90 | May 07 | 160 | 270 | 120 | 380 | 150 | 235 | 251,626 | 170,946 | 121,260 | 178,004 | 139,800 | Dry,in good condition |
| 1 | W.Hawkins | 189 | Oct 09 | | | | | 75 | 420 | | | | 856,000 | 740,000 | Dry,in good condition |
| 2 | W.Hawkins | | Dec 09 | | | | | 65 | 500 | | | | 221,360 | 198,120 | Wet,in fair condition |
| 3 | W.Hawkins | | Jan 10 | | | | | 65 | 600 | | | | 1,156,000 | 982,344 | Dry,in good condition |
| 4 | W.Hawkins | | Apr 10 | | | | | | 610 | | | | 856,000 | 736,000 | Dry,in gd.cond.,not in lin |
| 2 | J.Rhodeback | 185 | Apr 10 | | | | | | 685 | | | | 569,972 | 477,820 | Dry,in gd.cond.,not in lin |
| | TOTAL LIBERTY TOWNSHIP | | | | | | | | | 890,286 | 642,566 | 466,190 | 4,220,286 | 3,655,272 | |

EXHIBIT O-1 SHEET 7

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY APRIL 1910

## WELL RECORD REPORT

NORTH FIELD

MILFORD TWP.

APRIL 1910

| Well No. | Name | Acres | When Drilled | PRESSURES Apr.09 L | R | Sept.09 L | R | Apr.10 L | R | CAPACITIES April 1909 Open Flow | Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | D. Jaggers | 35 | Dec 07 | | 125 | | 100 | 105 | 45 90 | 405 560 | 241,472 | 131,260 | 156,830 | 110,880 | Wet,in fair condition |
| 1 | L.C.Stoughton | 100 | Dec 07 | 60 | 121 | | 90 | 100 | 30 75 | 380 296 | 97,400 | 24,600 | 39,210 | 20,000 | Wet,in bad condition |
| 2 | L.C.Stoughton | | Jan 08 | | 110 | | 95 | 105 | 50 90 | 204 797 | 139,800 | 34,950 | 131,260 | 85,940 | In fair condition |
| 3 | L.C.Stoughton | | Feb 08 | | 120 | | 100 | 125 | 45 75 | 221 360 | 139,800 | 49,556 | 97,400 | 85,940 | Wet and salty |
| 4 | L.C.Stoughton | | Sep 08 | | 112 | | 115 | 100 | 45 80 | ~~80,881~~ | ~~86,940~~ | ~~40,556~~ | ~~42,416~~ | ~~54,980~~ | Wet,in fair condition |
| 5 | L.C.Stoughton | 54 | Nov 08 | | 120 | | 115 | 105 | 45 85 | 673,040 | 280,034 | 163,888 | 156,830 | 97,400 | Dry,in fair condition |
| | | | TOTAL MILFORD TOWNSHIP | | | | | | | 2,298,974 | 1,337,306 | 594,640 | 633,946 | 435,110 | |

1-D Jaggers- Initial flow 5,000,000
1-L.C. Stoughton " " 2,000,000
2- " " " " 3,000,000
3- " " " " 2,000,000
5- " " " " 1,721,319
14,221,319

MORGAN TWP.

| Well No | Name | Acres | When Drilled | PRESSURES Apr.09 L | R | Sept.09 L | R | Apr.10 L | R | CAPACITIES April 1909 Open Flow | Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | H. Bell | 83 | Dec 09 | | | | | 45,305 | | | | | 477,820 | 363,726 | In fair condition |
| 2 | H. Bell | | Feb 10 | | | | | 55,475 | | | | | 511,908 | 477,820 | In good condition |
| | | | TOTAL MORGAN TOWNSHIP | | | | | | | | | | 989,728 | 841,546 | |

# EXHIBIT O-1 SHEET 8

## GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. APRIL, 1910

SUMMARY OF WELL REPORT - April 1910.

| Location Township & Field | Wells producing last report | Wells producing last report not reported this report | Wells producing last report now producing | Old Wells now producing that were not producing last report | New Wells now producing first time reported | Wells now producing | Production that was estimated | Average Capacity | Open Flow Total Capacity | Maximum rock Pressure | Minimum rock Pressure | Mean rock Pressure |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bennington | 21 | 4 | 17 | 0 | 0 | 17 | | 106,300 | 1,808,117 | 200 | 85 | 118 |
| Burlington | 29 | 0 | 29 | 0 | 0 | 29 | | 241,500 | 7,004,221 | 545 | 90 | 228 |
| Kokomo | 25 | 0 | 25 | 0 | 6 | 31 | | 367,600 | 11,396,656 | 630 | 175 | 375 |
| Greenville | 13 | 0 | 13 | 0 | 3 | 16 | | 270,400 | 4,326,977 | 570 | 150 | 293 |
| Washington | 16 | 1 | 16 | 0 | 4 | 20 | | 444,800 | 8,896,436 | 525 | 150 | 350 |
| Liberty | 6 | 1 | 5 | 0 | 5 | 10 | | 422,800 | 4,228,286 | 685 | 140 | 403 |
| Milford | 10 | 4 | 6 | 0 | 0 | 6 | | 105,500 | 633,946 | 90 | 75 | 82 |
| Morgan | 0 | 0 | 0 | 0 | 2 | 2 | | 495,000 | 989,728 | 475 | 306 | 390 |
| Miller | 8 | 8 | 0 | 0 | 0 | 0 | | | | | | |
| North Field | 128 | 17 | 111 | 0 | 20 | 131 | | 300,000 | 39,285,866 | 685 | 75 | 284 |
| Liberty | 7 | 3 | 4 | 0 | 2 | 6 | | 372,000 | 2,232,824 | 345 | 90 | 230 |
| Pleasant | 15 | 0 | 15 | 0 | 0 | 15 | 330,000 | 188,800 | 2,832,351 | 400 | 60 | 134 |
| Good Hope | 7 | 1 | 6 | 0 | 0 | 6 | | 256,000 | 1,236,591 | 95 | 45 | 72 |
| Laurel | 15 | 1 | 14 | 0 | 0 | 14 | | 134,000 | 1,877,359 | 250 | 75 | 136 |
| South Field | 44 | 5 | 39 | 0 | 2 | 41 | 330,000 | 199,500 | 8,179,125 | 400 | 45 | 141 |
| TOTAL NORTH & SOUTH FIELD | 172 | 22 | 150 | 0 | 22 | 172 | 330,000 | 276,000 | 47,464,701 | 685 | 45 | 250 |

EXHIBIT O-1 SHEET 9

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. APRIL 1910

WELLS DRILLED SINCE SEPTEMBER, 1909, FIRST TIME REPORTED.

NORTH FIELD

| No. | Name | Township | Date Drilled | Initial Production | Open Flow April 1910 | 50# Serv. April 1910 | Initial Rock Press. | April 1910 Rock Press. |
|---|---|---|---|---|---|---|---|---|
| 2 | J. Wince | McKean | Oct 09 | 1,449,218 | 995,000 | 836,560 | 675 | 490 |
| 2 | D. Allender | " | Apr 10 | 209,664 | 209,664 | 175,000 | 525 | 525 |
| 1 | E. Belt | " | Nov 09 | 577,812 | 221,360 | 192,120 | 600 | 430 |
| 2 | E. Belt | " | Dec 09 | 982,344 | 711,400 | 648,000 | 615 | 415 |
| 1 | C. Houck | " | Oct 09 | 121,000 | 185,062 | 156,830 | | 400 |
| 1 | J. Jordan | " | Mar 10 | 577,812 | 875,000 | 780,000 | 600 | 595 |
| 2 | W. Crooks | Granville | Oct 09 | 472,364 | 376,009 | 343,266 | 600 | 515 |
| 2 | W. Goodrich | " | Nov 09 | 472,364 | 343,266 | 266,604 | 500 | 415 |
| 1 | W. Wilson | " | Nov 09 | 1,193,944 | 478,000 | 391,825 | 500 | 385 |
| 2 | D. Ervin | Washington | Dec 09 | 2,784,150 | 1,980,000 | 1,744,800 | 650 | 525 |
| 1 | J. & S. Haas | " | Oct 09 | 696,740 | 350,670 | 305,252 | 500 | 375 |
| 2 | J. & S. Haas | " | Dec 09 | 892,064 | 284,236 | 241,472 | 475 | 365 |
| 1 | A. J. Wilson | " | Feb 10 | 346,600 | 197,968 | 156,830 | 570 | 515 |
| 1 | M. Hawkins | Liberty | Oct 09 | 2,172,700 | 854,000 | 780,000 | 600 | 420 |
| 2 | M. Hawkins | " | Dec 09 | 991,370 | 221,360 | 192,120 | 575 | 500 |
| 3 | M. Hawkins | " | Jan 10 | 1,193,944 | 1,154,000 | 982,344 | 600 | 600 |
| 4 | M. Hawkins | " | Apr 10 | 1,000,000 | 854,000 | 756,000 | 610 | 610 |
| 2 | J. Rhodebeck | " | Apr 10 | 414,000 | 545,072 | 477,820 | 685 | 685 |
| 1 | H. Bell | Morgan | Dec 09 | 577,812 | 477,820 | 362,726 | 400 | 305 |
| 2 | H. Bell | " | Feb 10 | 545,072 | 511,908 | 477,820 | 530 | 475 |
| | | TOTAL NORTH FIELD | | 16,671,654 | 11,826,795 | 10,268,328 | | |

SOUTH FIELD

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | A. Alspach | Liberty | Nov 09 | 1,500,000 | 545,072 | 443,068 | | 295 |
| 1 | J. Sands | " | Mar 10 | 570,000 | 246,500 | 192,120 | | 295 |
| | | TOTAL SOUTH FIELD | | 2,070,000 | 791,572 | 635,188 | | |
| | | TOTAL BOTH FIELDS | | 18,741,654 | 12,618,367 | 10,905,516 | | |

EXHIBIT O-1 SHEET 10

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. APRIL 1910

WELLS PULLED AND SOLD SINCE SEPTEMBER, 1909.

NORTH FIELD

| No. | Name | Township | Open Flow Sept.1909 | 50# Serv. Sept.1909 | Rock Press. Sept.1909 | |
|---|---|---|---|---|---|---|
| 1 | O. P. Van Fossen | Bennington | 74,210 | 17,560 | 125 | Pulled |
| 2 | O. P. Van Fossen | " | 27,720 | 12,390 | 130 | " |
| 1 | J. D. Edwards | " | 97,400 | 49,556 | 125 | " |
| 2 | H. Hawkins | " | 21,480 | | 100 | " |
| 1 | P. Wells | Liberty | 32,820 | 21,480 | 150 | " |
| 1 | F. Dripps | Milford | 82,114 | | 65 | " |
| 1 | F. Hunter | " | 27,720 | 12,390 | 85 | Sold |
| 1 | O. Hunter | " | 203,616 | 110,680 | 95 | " |
| 1 | D. & A. Chapman | " | 39,210 | 17,560 | 100 | " |
| 1 | F. & M. Long | Miller | 34,950 | 17,560 | 170 | Pulled |
| 1 | A. & M. Harrison | " | 170,946 | 17,560 | 110 | Sold |
| 4 | A. & M. Harrison | " | 76,310 | 34,950 | 90 | " |
| 2 | E & P. Beinhower | " | 55,340 | 24,600 | 90 | " |
| 1 | J. Baxter | " | 42,738 | 12,390 | 160 | " |
| 1 | D. C. Baxter | " | 87,670 | 52,416 | 120 | " |
| 2 | D. C. Baxter | " | 42,738 | 30,270 | 100 | " |
| 1 | A. & V. Lohr | " | 42,738 | 30,270 | 100 | " |
| | TOTAL NORTH FIELD | | 1,159,920 | 461,832 | | |

SOUTH FIELD

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | J. M. Rowland | Liberty | 60,368 | 55,340 | 210 | Pulled |
| 1 | H. M. Beery | " | 382,340 | 292,640 | 130 | " |
| 1 | Baltimore School | " | 578,344 | 363,726 | 185 | " |
| 1 | W. F. Walker | Good Hope | 139,800 | 121,080 | 100 | " |
| 1 | W. Kline | Laurel | 55,340 | 40,000 | 60 | " |
| | TOTAL SOUTH FIELD | | 1,216,092 | 872,786 | | |
| | TOTAL BOTH FIELDS | | 2,376,012 | 1,334,618 | | |

# EXHIBIT O-2 SHEET 1

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1910

## WELL RECORD REPORT

NORTH FIELD — HEBRON TWP. — SEPTEMBER, 1910

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.09 L | Sept.09 R | Apr. 10 L | Apr. 10 R | Sept.10 L | Sept.10 R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | E.Dumbauld | 168 | Jan. 05 | $100.00 | 120 | 145 | 45 | 150 | 125 | 125 | 67,910 | 44,602 | 44,602 | 39,210 | 80,263 | Wet & salty |
| 2 | E.Dumbauld | | Apr. 05 | 100.00 | 120 | 155 | 45 | 120 | 125 | 125 | 345,266 | 280,034 | 321,060 | 254,444 | 251,526 | Salty |
| 3 | E.Dumbauld | | Jan. 06 | 100.00 | 120 | 150 | 70 | 135 | 125 | 150 | 97,400 | 87,720 | 82,416 | 24,600 | 110,860 | Wet & salty |
| 1 | Mrs.Larimore | 35 | Feb. 08 | 80.00 | 115 | 155 | 40 | 115 | | 100 | 224,588 | 178,004 | 156,634 | 97,400 | 88,940 | |
| 1 | W.H.Douglass | 16 | Oct. 08 | 80.00 | 115 | 155 | 45 | 110 | | 95 | 447,800 | 391,825 | 271,650 | 170,946 | 170,946 | Supply Lock |
| 1 | W.H.Douglass | 80 | Jul. 09 | 80.00 | 100 | 270 | 45 | 190 | | 220 | 131,860 | 85,940 | 121,060 | 85,940 | 70,260 | |
| 1 | Wenchem Heirs | 2 | Dec. 08 | 80.00 | 100 | 325 | 40 | 200 | | 215 | 131,860 | 97,400 | 83,968 | 64,139 | 70,260 | |
| | | | TOTAL HEBRON TOWNSHIP | | | | | | | | 2,958,880 | 2,078,925 | 1,808,117 | 1,176,408 | 840,074 | |

EXHIBIT O-2 SHEET 2

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1910

# WELL RECORD REPORT

NORTH FIELD — BURLINGTON TWP. — SEPTEMBER, 1910

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.09 L | Sept.09 R | Apr. 10 L | Apr. 10 R | Sept.10 L | Sept.10 R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | C.Stinson | 80 | 08 | $200.00 | 100 | 225 | 55 | 195 | 95 | 190 | 552,160 | 288,436 | 221,360 | 170,946 | 256,444 | In fair condition |
| 1 | J.Dunlap | 135 | | 100.00 | 95 | 215 | 55 | 195 | 105 | 165 | 148,320 | 97,400 | 121,080 | 85,940 | 97,400 | Very wet - siphoned |
| 1 | G.Dunlap | 75 | | 100.00 | 105 | 180 | 75 | 165 | 110 | 160 | 844,800 | 221,360 | 534,760 | 231,416 | 305,252 | In good condition |
| 1 | A.Channell | 142 | 08 | 100.00 | 95 | 210 | 69 | 175 | 105 | 155 | 221,360 | 148,320 | 170,946 | 151,260 | 110,880 | In fair condition |
| 1 | A.J.Wilson | 40 | 08 | 200.00 | 105 | 225 | 80 | 160 | 95 | 160 | 192,120 | 156,650 | 163,888 | 97,400 | 241,472 | In fair condition |
| 2 | A.J.Wilson | 40 | Jan. 06 | 100.00 | 40 | 220 | 40 | 175 | 125 | 200 | 192,120 | 189,800 | 189,800 | 97,400 | 221,360 | In fair condition |
| 1 | A.Patton | 60 | | 100.00 | 95 | 185 | 55 | 160 | 100 | 155 | 48,050 | 39,210 | 99,210 | 84,600 | 48,050 | Wet & very weak |
| 1 | N.Bash | 16 | | 200.00 | 105 | 205 | 80 | 215 | 120 | 230 | 221,360 | 192,120 | 121,080 | 97,400 | 163,888 | Dry, in good condition |
| 1 | J.Beatty | 96 | 08 | 200.00 | 90 | 120 | 40 | 90 | 110 | 120 | 78,410 | 56,340 | 87,670 | 61,625 | 61,625 | In bad condition-leaks |
| 1 | R.Boyd (Edman) | 156 | Sep. 08 | 100.00 | 115 | 165 | 45 | 170 | 90 | 135 | 148,320 | 70,260 | 20,406 | 11,771 | 48,050 | Very wet & salty |
| 1 | R.Boyd (Edman) | | Jun. 06 | 100.00 | 95 | 145 | 45 | 120 | 90 | 145 | 192,120 | 156,650 | 170,946 | 97,400 | 121,080 | Wet - siphoned |
| 1 | W.Edman | 44 | Sep. 08 | 100.00 | 100 | 165 | 80 | 150 | 105 | 150 | 405,560 | 514,000 | 545,072 | 313,640 | 545,072 | Very wet - leaks |
| 1 | R.A.Adams | 120 | Oct. 08 | 200.00 | 110 | 290 | 60 | 240 | 110 | 245 | 159,800 | 121,080 | 205,816 | 156,650 | 156,650 | Wet - siphoned |
| 1 | S.McNaughten | 114 | Mar. 04 | 200.00 | 110 | 290 | 60 | 210 | 95 | 195 | 170,946 | 159,800 | 110,880 | 70,260 | 97,400 | Wet, in fair condition |
| 1 | Wm.Weiberger | 50 | Aug. 04 | 200.00 | 45 | 330 | 40 | 235 | 95 | 210 | 82,040 | 52,616 | 87,670 | 78,410 | 87,670 | Wet & salty - siphoned |
| 1 | J.H.Conrad | 208 | Jul. 08 | 200.00 | 120 | 350 | 35 | 340 | 115 | 295 | 197,968 | 163,888 | 477,620 | 405,560 | 414,000 | Wet - siphoned |
| 1 | Wm.Williams | 75 | Jun. 04 | 200.00 | 110 | 355 | 80 | 265 | 95 | 255 | 159,800 | 110,880 | 197,968 | 159,800 | 159,800 | Wet & salty |
| 2 | Wm.Williams | | Sep. 09 | 200.00 | | | 70 | 255 | 95 | 240 | 97,400 | | 205,816 | 170,946 | 163,888 | In fair condition |
| 1 | G.Householder | 54 | Jul. 06 | 100.00 | 60 | 180 | 40 | 140 | 125 | 145 | 215,512 | 97,400 | 221,360 | 163,888 | 159,800 | In fair condition |
| 2 | G.Householder | 84 | Aug. 06 | 100.00 | 60 | 170 | 40 | 140 | 125 | 140 | 159,800 | 85,940 | 151,260 | 85,940 | 146,320 | Dry, in fair condition |
| 2 | J.Williams | 196 | Oct. 07 | 200.00 | 105 | 325 | 40 | 245 | 90 | 225 | 184,650 | 151,260 | 185,062 | 159,800 | 110,880 | Salty,in fair condition |
| 3 | J.Williams | | Jan. 08 | 200.00 | 40 | 340 | 60 | 265 | 90 | 220 | 892,064 | 775,000 | 288,436 | 261,578 | 261,578 | In fair condition |
| 1 | H.Vince | 78 | Oct. 08 | 200.00 | | 535 | 45 | 400 | 105 | 380 | 805,462 | 802,217 | 696,740 | 578,344 | 261,578 | Has been worked hard |
| 2 | H.Vince | | Sep. 09 | 200.00 | | 670 | 45 | 545 | 110 | 420 | 805,462 | 800,972 | 696,740 | 545,072 | 251,416 | Has been worked hard |
| 1 | C.M.Haas | 197 | Feb. 09 | 200.00 | 50 | 370 | 60 | 225 | 85 | 200 | 626,000 | 545,072 | 221,360 | 197,968 | 170,946 | In fair condition |
| 1 | Mrs.Wm.Neff | 45 | Apr. 09 | 200.00 | 120 | 360 | 60 | 310 | 120 | 265 | 1,744,800 | 1,730,628 | 657,000 | 477,620 | 427,000 | Wet, in fair condition |
| 2 | Mrs.Wm.Neff | | Sep. 09 | 200.00 | | 415 | 70 | 370 | 120 | 315 | 441,740 | | 221,360 | 170,946 | 156,650 | Wet, in fair condition |
| 1 | J.H.Haas | 44 | Sep. 09 | 200.00 | | | 70 | 255 | 105 | 220 | 110,880 | | 58,340 | 44,808 | 67,910 | Wet & salty |
| | | | TOTAL BURLINGTON TOWNSHIP | | | | | | | | 9,651,556 | 7,653,641 | 7,004,221 | 5,300,458 | 5,256,579 | |

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EXHIBIT O-2 SHEET 3

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1910

# WELL RECORD REPORT

NORTH FIELD — McKEAN TWP. — SEPTEMBER, 1910

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.09 L | Sept.09 R | Apr. 10 L | Apr. 10 R | Sept.10 L | Sept.10 R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S.S.Devinney | 100 | Feb. 06 | $200.00 | 160 | 505 | 45 | 460 | 165 | 475 | 675,844 | 636,462 | 1,216,000 | 1,130,000 | 1,366,480 | Dry, in good condition |
| 2 | S.& M.Devinney | 127 | Jun. 06 | 200.00 | 110 | 525 | 105 | 410 | 165 | 460 | 231,416 | 226,368 | 209,664 | 192,120 | 197,968 | Dry, in good condition |
| 1 | D.& M.Ramey | 109 | Jul. 06 | 200.00 | 160 | 555 | 95 | 530 | 220 | 565 | 215,512 | 209,664 | 296,844 | 256,552 | 260,034 | Dry, in good condition |
| 2 | E.L.Jones | 335 | Feb. 07 | 200.00 | 140 | 360 | 225 | 310 | 195 | 300 | 226,368 | 205,616 | 178,004 | 139,800 | 48,050 | Has been worked hard |
| 3 | E.L.Jones | | Mar. 07 | 100.00 | 140 | 445 | 150 | 356 | 215 | 350 | 511,908 | 445,068 | 301,048 | 251,526 | 324,760 | Dry, in fair condition |
| 3 | E.L.Jones | | May. 07 | 100.00 | 135 | 650 | 55 | 630 | 250 | 620 | 382,340 | 372,845 | 324,760 | 241,472 | 221,560 | Dry, in good condition |
| 1 | M.Holler | 100 | Sep. 06 | 200.00 | 140 | 410 | 225 | 340 | 190 | 330 | 511,908 | 445,068 | 324,760 | 301,048 | 308,252 | Dry, in good condition |
| 1 | F.M.Brooks | 68 | Oct. 06 | 200.00 | 170 | 285 | 225 | 260 | 175 | 235 | 376,009 | 339,564 | 511,908 | 445,068 | 511,908 | Wet,salty,in fair cond |
| 2 | F.M.Brooks | 186 | Nov. 06 | 200.00 | 205 | 285 | 190 | 220 | 195 | 210 | 625,642 | 545,072 | 301,048 | 251,526 | 260,670 | Wet,salty,in fair cond |
| 3 | F.M.Brooks | | Apr. 07 | 200.00 | 205 | 340 | 190 | 210 | 175 | 190 | 292,640 | 271,630 | 271,630 | 231,416 | 221,340 | In fair condition |
| 4 | F.M.Brooks | | Mar. 08 | 100.00 | 205 | 340 | 190 | 210 | 175 | 190 | 445,068 | 408,560 | 414,000 | 360,670 | 296,844 | Wet,salty,tubing leaks |
| 1 | P.C.Smith | 80 | Dec. 06 | 200.00 | 140 | 490 | 105 | 380 | 195 | 345 | 74,210 | 65,396 | 78,410 | 55,340 | 116,500 | In fair condition |
| 1 | J.F.Holler | 96 | Jun. 07 | 200.00 | 175 | 540 | 100 | 300 | 195 | 300 | 156,650 | 131,260 | 101,917 | 83,966 | 121,080 | Wet, in fair condition |
| 1 | C.R.Cramer (Smith) | 114 | Jun. 07 | 200.00 | 150 | 450 | 180 | 340 | 195 | 338 | 619,217 | 717,586 | 315,640 | 284,256 | 511,908 | In good condition |
| 1 | J.B.Smith | 101 | Jul. 07 | 200.00 | 180 | 225 | 170 | 205 | 170 | 195 | 50,270 | 28,600 | 82,416 | 46,264 | 110,880 | Wet & salty |
| 1 | Mrs.D.M.Brooks | 32 | Aug. 07 | 200.00 | 140 | 190 | 100 | 175 | 180 | 180 | 284,256 | 271,630 | 148,320 | 131,240 | 121,240 | Wet & salty-siphoned |
| 1 | Mrs.M.E.Downer | 142 | Aug. 07 | 100.00 | 120 | 315 | 105 | 260 | 170 | 255 | 151,240 | 110,880 | 388,663 | 357,007 | 368,340 | Dry - salty |
| 2 | Mrs.M.E.Downer | | Oct. 07 | 100.00 | 120 | 410 | 100 | 370 | 170 | 320 | 121,080 | 97,400 | 148,320 | 121,080 | 139,800 | Wet & salty |
| 3 | Mrs.M.E.Downer | | Dec. 07 | 100.00 | 110 | 465 | 100 | 400 | 155 | 405 | 477,620 | 443,068 | 407,689 | 391,825 | 121,880 | Very wet& " -gaining |
| 1 | T.M.Brooks | 40 | Nov. 07 | 200.00 | 140 | 350 | 100 | 280 | 180 | 300 | 625,642 | 578,364 | 477,620 | 405,560 | 292,640 | Very wet & salty |
| 1 | Mrs.J.M.Brister | 42 | Dec. 07 | 200.00 | 180 | 265 | 140 | 230 | 205 | 215 | 376,009 | 357,007 | 321,060 | 256,552 | 170,944 | Dry, in fair condition |
| 1 | J.Winse | 200 | Jun. 08 | 200.00 | | 540 | 60 | 370 | 105 | 340 | 301,048 | 296,844 | 321,060 | 309,456 | 308,252 | Dry, in good condition |
| 2 | J.Winse | | May. 09 | 200.00 | | 610 | 50 | 435 | 100 | 380 | | | 996,000 | 636,600 | 544,512 | Territory badly pulled |
| 3 | J.Winse | | Oct. 09 | 200.00 | | | 70 | 490 | 100 | 395 | 215,512 | 205,616 | 139,800 | 121,080 | 156,650 | Wet &salty-in fair con |
| 1 | S.W.Davis | 75 | Nov. 08 | 200.00 | 150 | 480 | 180 | 390 | 165 | 360 | 665,436 | 600,972 | 618,244 | 511,908 | 513,660 | Territory badly pulled |
| 1 | D.Allender (Dush) | 106 | Sep. 09 | 200.00 | | 715 | 50 | 440 | 110 | 430 | | | 209,664 | 175,000 | 192,120 | Dry, in fair condition |
| 2 | D.Allender (Dush) | | Apr. 10 | 800.00 | | | | 525 | | 425 | | | 221,360 | 192,120 | 97,400 | Dry, in fair condition |
| 1 | E.Belt | 28 | Nov. 09 | 200.00 | | | 40 | 430 | 110 | 340 | | | 711,400 | 648,000 | 292,640 | Wet, in fair condition |
| 2 | E.Belt | | Dec. 09 | 200.00 | | | 60 | 415 | 100 | 285 | | | 661,740 | | 672,000 | Dry, in good condition |
| 3 | E.Belt | | May. 10 | 200.00 | | | | | | 485 | | | 875,000 | 780,000 | 776,000 | Wet, in fair condition |
| 1 | J.Jordan | 45 | Mar. 10 | 200.00 | | | | 395 | | 545 | | | | | 444,000 | Dry, in good condition |
| 2 | J.Jordan | | Jun. 10 | 200.00 | | | | | | 540 | | | | | 692,064 | Dry, in good condition |
| 1 | S.Elliott | 90 | Jun. 10 | 400.00 | | | | | | 445 | | | | | | |
| | | | TOTAL McKEAN TOWNSHIP | | | | | | | | 9,420,013 | 8,422,226 | 11,396,456 | 9,954,252 | 10,755,576 | |

PAGE BOUND

# EXHIBIT O-2 SHEET 4

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT 1910

## WELL RECORD REPORT

GAS FIELD — GRATTAN TWP. — SEPTEMBER, 1910

| Well No. | Farm | Acres | Date Drilled | Well Rock | PRESSURES Sept.09 L. P. | Apr. 10 L. P. | Sept.10 L. P. | CAPACITIES Sept.1909 Open Flow | Sept.1909 Eq. Serv. | April 1910 Open Flow | April 1910 Eq. Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J.Hanover | 100 | Jul. 07 | 1800.00 | 185 200 | 160 195 | 240 150 | 80,584 | 40,574 | 131,260 | 110,680 | 95,585 | Very wet & salty |
| 2 | J.Hanover | | Oct. 07 | 100.00 | 90 240 | 145 190 | 240 145 | 67,210 | 49,492 | 87,186 | 43,758 | 42,758 | Wet & salty |
| 1 | J.Harter | 105 | Nov. 07 | 200.00 | 70 240 | 215 190 | 225 140 | 110,000 | 57,400 | 98,585 | 67,670 | 70,260 | In bad condition |
| 2 | J.Harter | | Jan. 08 | 100.00 | 70 245 | 160 160 | 225 235 | 678,344 | 121,004 | | | | In very bad condition |
| 1 | Ed.Cross | 115 | Feb. 08 | 200.00 | 220 270 | 160 240 | 225 180 | 139,000 | 121,000 | 222,240 | 213,640 | 213,660 | Wet, in fair condition |
| 1 | C.Miller | 100 | Apr. 08 | 200.00 | 170 300 | 80 220 | 230 300 | 344,280 | 221,080 | 121,260 | 110,080 | 121,080 | Wet & salty, in fair cond. |
| 1 | Kate Pence | 80 | Apr. 08 | 200.00 | 220 240 | 190 215 | 220 215 | 324,760 | 280,054 | 155,040 | 145,668 | 144,500 | In fair condition |
| 2 | Kate Pence | 82 | Aug. 08 | 200.00 | 220 270 | 190 240 | 200 210 | 497,220 | 443,044 | 186,880 | 121,080 | 197,548 | Very wet & salty |
| 1 | D.L.Owens | 88 | Jan. 08 | 100.00 | 100 240 | 185 240 | 195 225 | 151,260 | 86,940 | 97,670 | 78,410 | 110,080 | In fair condition |
| 2 | D.L.Owens | | Sept. 08 | 100.00 | 100 240 | 185 240 | 140 270 | 571,843 | 321,060 | 442,200 | 287,007 | 276,009 | Dry, in good condition |
| 1 | W.Crooks | 100 | Jul. 08 | 200.00 | 75 290 | 145 215 | 140 280 | 251,824 | 211,612 | 228,614 | 170,344 | 88,940 | Very wet & salty |
| 2 | W.Crooks | | Oct. 08 | 200.00 | | 145 215 | 170 300 | | | 374,009 | 345,264 | 357,007 | Dry, in good condition |
| 1 | H.Goodrich | 200 | Jul. 08 | 200.00 | 125 410 | 140 340 | 200 245 | 568,658 | 308,288 | 391,825 | 253,528 | 414,000 | Wet, in fair condition |
| 2 | H.Goodrich | | Nov. 08 | 200.00 | | 190 410 | 175 435 | | | 543,264 | 264,604 | 280,084 | Dry, in good condition |
| 1 | J.Richards | 200 | Jul. 09 | 200.00 | 695 | 190 370 | 195 340 | 1,624,800 | 1,744,800 | 660,000 | 740,000 | 892,064 | Dry, in good condition |
| 1 | W.E.Wilson | 92 | Nov. 09 | 200.00 | | 165 365 | 175 445 | | | 479,000 | 391,625 | 628,000 | Slightly wet, in fair cond. |
| | | | TOTAL GRATTAN TOWNSHIP | | | | | 4,652,565 | 4,287,600 | 4,286,977 | 3,652,692 | 4,808,725 | |

EXHIBIT O-2 SHEET 5

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1910

7201/2

SE BOUND

## WELL RECORD REPORT

NORTH FIELD — WASHINGTON TWP. — SEPTEMBER, 1910

| Well No. | Name | Acres | When Drilled | Well Rate | PRESSURES Sept.09 L | R | Apr. 10 L | R | Sept.10 L | R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Wm.Vance | 1 | 08 | $200.00 | 120 | 190 | 45 | 180 | 90 | 180 | 163,688 | 110,880 | 110,880 | 70,298 | 121,080 | Dry, in fair condition |
| 2 | Wm.Vance | 1 | 08 | Free Gas | 120 | 190 | 40 | 150 | 95 | 185 | 131,260 | 30,270 | 110,880 | 65,949 | 110,880 | Wet, in fair condition |
| 1 | W.W.Reynolds | 80 | May. 05 | 100.00 | 110 | 300 | 40 | 220 | 95 | 250 | 48,050 | 34,980 | 39,210 | 21,480 | 39,210 | Wet, in bad condition |
| 1 | A.J.Stanton | 8 | Jun. 05 | 100.00 | 105 | 300 | 45 | 240 | 90 | 210 | 131,260 | 110,880 | 121,080 | 97,400 | 121,080 | Wet, in fair condition |
| 1 | B.Williams | 260 | Mar. 05 | 200.00 | 60 | 390 | 40 | 315 | 95 | 295 | 511,908 | 405,560 | 271,650 | 221,360 | 256,444 | Dry, in good condition |
| 2 | B.Williams | | Sep. 05 | 200.00 | 60 | 400 | 70 | 375 | 100 | 285 | 391,825 | 560,175 | 170,946 | 146,320 | 97,400 | Very wet at times |
| 1 | H.Bell | 110 | Apr. 05 | 200.00 | 95 | 525 | 75 | 185 | 105 | 305 | 139,800 | 121,080 | 261,578 | 221,360 | 110,880 | In fair condition |
| 1 | Chas.Roberts | 152 | Aug. 08 | 200.00 | 70 | 545 | 70 | 270 | 110 | 205 | 477,620 | 314,000 | 382,340 | 328,460 | 271,650 | Very wet & salty |
| 2 | Chas.Roberts | | Aug. 08 | 200.00 | 70 | 420 | 70 | 355 | 120 | 255 | 305,252 | 201,578 | 131,260 | 85,940 | 156,830 | Wet & salty - some oil |
| 3 | Chas.Roberts | | Jul. 09 | 200.00 | | 600 | 110 | 345 | 115 | 270 | 2,700,000 | | 982,344 | 907,000 | 716,000 | Dry, salty |
| 1 | S.L.Haas | 118 | Dec. 08 | 200.00 | 100 | 540 | 70 | 365 | 135 | 315 | 1,256,064 | 1,730,682 | 716,000 | 570,264 | 268,458 | Wet & salty, in fair cond. |
| 2 | S.L.Haas | | Feb. 09 | 200.00 | 100 | 565 | 60 | 420 | 155 | 360 | 1,866,000 | 1,166,000 | 756,000 | 648,000 | 382,340 | Dry & salty, in fair cond |
| 3 | S.L.Haas | | Mar. 09 | 200.00 | 105 | 570 | 55 | 360 | 120 | 245 | 760,000 | 696,740 | 566,512 | 221,360 | 110,880 | Dry, in fair condition |
| 4 | S.L.Haas | | May. 09 | 200.00 | 105 | 615 | 60 | 445 | 150 | 430 | 511,908 | 405,560 | 309,456 | 256,582 | 156,830 | Dry, in fair condition |
| 5 | S.L.Haas | | Jun. 09 | 200.00 | | 655 | 60 | 495 | 150 | 425 | 315,660 | 296,844 | 256,444 | 215,512 | 139,800 | Wet, in fair condition |
| 1 | D.Ervin | 33 | Aug. 09 | 200.00 | | 750 | 55 | 515 | 115 | 470 | 1,744,800 | 1,572,000 | 1,117,000 | 1,054,000 | 800,972 | In good condition |
| 2 | D.Ervin | | Dec. 09 | 200.00 | | | 65 | 525 | 120 | 475 | | | 1,980,000 | 1,744,800 | 1,480,000 | Dry, in good condition |
| 1 | J.& S.Haas | 99 | Oct. 09 | 200.00 | | | 65 | 375 | 105 | 210 | | | 380,070 | 308,252 | 121,080 | Dry, in good condition |
| 2 | J.& S.Haas | | Dec. 09 | 200.00 | | | 65 | 345 | 105 | 295 | | | 254,236 | 241,472 | 271,650 | Wet, in fair condition |
| 1 | A.J.Wilson | 544 | Feb. 10 | 200.00 | | | 60 | 515 | 100 | 480 | | | 197,948 | 156,830 | 97,400 | In fair condition |
| 1 | E.Van Wy | 90 | Oct. 10 | 200.00 | | | | | | 715 | | | | | 600,000 | In good condition |
| | | | TOTAL WASHINGTON TOWNSHIP | | | | | | | | 10,853,476 | 7,617,145 | 8,896,435 | 7,589,542 | 6,450,804 | |

## EXHIBIT O-2 SHEET 6

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, SEPT. 1910

WELL RECORD REPORT

LIBERTY TWP. SEPTEMBER, 1910

LICK RUN

| Well No. | Name | Acres | When Drilled | Well Rock | PRESSURES Sept.09 I. P. | Apr. 10 I. P. | Sept.10 I. P. | Sept.1909 Open Flow | CAPACITIES Sept.1909 Ord Serv. | April 1910 Open Flow | April 1910 Ord Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | P.J.Brooks | 175 | Mar. 08 | $100.00 | 80 200 | 138 180 | 148 188 | 70,560 | 85,540 | 85,540 | 54,560 | 46,600 | Not a mkty, in bad cond. |
| 2 | P.J.Brooks | | May. 08 | 100.00 | 80 250 | 138 220 | 150 220 | 121,000 | 97,400 | 170,344 | 144,320 | 144,320 | Not a mkty, in bad cond. |
| 3 | C.Slife | 191 | Jan. 07 | 200.00 | 120 270 | 130 240 | 118 218 | 194,130 | 144,530 | 178,004 | 152,888 | 170,940 | Not in fair condition |
| 4 | H.L.Barker | 80 | Sept. 07 | 200.00 | 130 280 | 138 228 | 125 220 | 170,344 | 151,360 | 178,004 | 139,600 | 178,004 | Not in good condition |
| 5 | H.Hawkins | 124 | Oct. 09 | 200.00 | | 78 430 | 228 450 | | | 656,000 | 780,000 | 1,180,888 | Not in good condition |
| 6 | H.Hawkins | | Dec. 09 | 200.00 | | 48 200 | 228 500 | | | 321,360 | 332,128 | 218,632 | Not a mkty, in fair cond. |
| 7 | H.Hawkins | | Jan. 10 | 200.00 | | 48 600 | 210 580 | | | 1,124,000 | 988,344 | 678,000 | Not in good condition |
| 8 | H.Hawkins | | Apr. 10 | 200.00 | | 48 610 | 220 590 | | | 684,000 | 768,000 | 1,117,000 | Not in good condition |
| 9 | H.Hawkins | 46 | Jan. 10 | 200.00 | | | 448 | | | | | 1,178,200 | Not in good condition |
| 10 | J.Stockdale | 125 | Apr. 10 | 200.00 | | | 448 470 | | | | | 678,344 | Not in good condition |
| | | | TOTAL LIBERTY TOWNSHIP | | | | | 642,864 | 484,190 | 4,288,256 | 3,885,278 | 6,007,908 | |

EXHIBIT O-2 SHEET 7

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1910

## WELL RECORD REPORT

NORTH FIELD — KNOX TOWNSHIP — SEPTEMBER, 1910

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.09 L | R | Apr. 10 L | R | Sept.10 L | R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J.Thompson | 82 | Jun. 10 | $200.00 | | | | | 470 | | | | | | 2,553,800 | In good condition |
| 1 | A.& E.Mills | 78 | Jul. 10 | 200.00 | | | | | 465 | | | | | | 1,572,000 | In good condition |
| 2 | A.& E.Mills | | Aug. 10 | 200.00 | | | | | 560 | | | | | | 3,849,000 | In good condition |
| 1 | H.Penick | 3 | Jul. 10 | 200.00 | | | | | 705 | | | | | | 716,000 | In good condition |
| 1 | W.Heiberger | 30 | Aug. 10 | 200.00 | | | | | 455 | | | | | | 800,000 | In good condition |
| 1 | J.Moats | 90 | Aug. 10 | 200.00 | | | | | 485 | | | | | | 800,000 | In good condition |
| 1 | J.Burkholder | 129 | Sep. 10 | 200.00 | | | | | 500 | | | | | | 1,000,000 | In good condition |
| 1 | M.Vancetrand | 106 | Sep. 10 | 200.00 | | | | | 456 | | | | | | | |
| | | | TOTAL KNOX TOWNSHIP | | | | | | | | | | | | 12,276,800 | |

MORGAN TOWNSHIP, KNOX COUNTY

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.09 L | R | Apr. 10 L | R | Sept.10 L | R | CAPACITIES Sept.1909 Open Flow | Sept.1909 50# Serv. | April 1910 Open Flow | April 1910 50# Serv. | Sept.1910 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | H.Bell | 82 | Dec. 09 | $200.00 | | | 45 | 305 | 100 | 180 | | | 477,820 | 363,726 | 97,400 | Wet - some oil |
| 2 | H.Bell | | Feb. 10 | 200.00 | | | 58 | 475 | 100 | 415 | | | 511,908 | 477,820 | 382,540 | In good condition |
| | | | TOTAL MORGAN TOWNSHIP | | | | | | | | | | 989,728 | 841,546 | 479,940 | |

CLAY TOWNSHIP
KNOX COUNTY

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | I.Miller | 76 | Oct. 10 | $200.00 | | | | | 475 | | | | | | 400,000 | In good condition |

# EXHIBIT O-2 SHEET 8

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1910

SUMMARY

| | Sept. 1909 Open Flow | Sept. 1909 Bbl Serv. | April 1910 Open Flow | April 1910 Bbl Serv. | Sept. 1910 Open Flow |
|---|---|---|---|---|---|
| Total North Field | 40,344,681 | 31,446,603 | 39,588,566 | 32,615,251 | 46,682,808 |
| Wells North Field | 128 | | 121 | | 125 |
| Average Production | 314,411 | 246,000 | 300,000 | 249,000 | 374,800 |
| Total South Field | 18,994,601 | 12,922,368 | 8,179,535 | 6,181,296 | 11,809,259 |
| Wells South Field | 46 | | 41 | | 42 |
| Average Production | 343,500 | 253,000 | 199,500 | 150,000 | 282,000 |
| Grand Total, Both Fields | 54,339,482 | 44,368,561 | 47,444,701 | 38,796,547 | 58,641,767 |
| Wells, Both Fields | 172 | | 172 | | 167 |
| Average Production | 327,000 | 258,000 | 276,000 | 228,400 | 351,000 |

# EXHIBIT O-2 SHEET 9

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1910

ANALYSIS OF WELL REPORT — SEPTEMBER, 1910

| Location Township & Field | Wells producing last report | Wells producing last report not reported this report | Wells producing last report now producing | Old Wells now producing that were not producing last report | New Wells now producing first time reported | Wells now producing | Production that was estimated | Average Capacity | Open Flow Total Capacity | Maximum Rock Pressure | Minimum Rock Pressure | Mean Rock Pressure |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bennington | 17 | 10 | 7 | 0 | 0 | 7 | | 120,000 | 840,074 | 220 | 95 | 145 |
| Burlington | 29 | 1 | 28 | 0 | 0 | 28 | | 186,000 | 5,256,379 | 360 | 135 | 215 |
| McKean | 31 | 2 | 29 | 0 | 3 | 32 | | 336,000 | 10,753,576 | 560 | 180 | 367 |
| Granville | 16 | 0 | 16 | 0 | 0 | 16 | | 263,000 | 4,205,725 | 500 | 145 | 300 |
| Washington | 20 | 0 | 20 | 0 | 1 | 21 | | 306,200 | 6,430,804 | 715 | 150 | 325 |
| Liberty | 10 | 1 | 9 | 0 | 1 | 10 | | 600,800 | 6,007,908 | 670 | 185 | 445 |
| Eden | 0 | 0 | 0 | 0 | 8 | 8 | | 1,525,000 | 12,278,300 | 705 | 470 | 582 |
| Morgan | 2 | 0 | 2 | 0 | 0 | 2 | | 240,000 | 479,740 | 415 | 150 | 282 |
| Clay | 0 | 0 | 0 | 0 | 1 | 1 | | 600,000 | 600,000 | | | 475 |
| Milford | 6 | 6 | 0 | 0 | 0 | 0 | | | | | | |
| North Field | 131 | 20 | 111 | 0 | 14 | 125 | | 374,800 | 46,832,508 | 715 | 95 | 324 |
| Liberty | 6 | 0 | 6 | 0 | 0 | 6 | | 237,600 | 1,426,892 | 210 | 90 | 160 |
| Pleasant | 15 | 1 | 14 | 0 | 0 | 14 | 250,000 | 170,000 | 2,396,442 | 300 | 75 | 124 |
| Good Hope | 6 | 0 | 6 | 0 | 0 | 6 | | 217,800 | 1,308,934 | 90 | 65 | 72 |
| Laurel | 14 | 1 | 13 | 0 | 3 | 16 | 3,000,000 | 405,000 | 6,481,991 | 560 | 72 | 200 |
| South Field | 41 | 2 | 39 | 0 | 3 | 42 | 3,250,000 | 282,000 | 11,809,259 | 560 | 68 | 150 |
| TOTAL NORTH & SOUTH FIELDS | 172 | 22 | 150 | 0 | 17 | 167 | 3,250,000 | 361,000 | 58,641,767 | 715 | 65 | 280 |

# EXHIBIT O-2 SHEET 10

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1910

WELLS DRILLED SINCE APRIL, 1910 - FIRST TIME REPORTED

NORTH FIELD

| Township | No. | Name | Date Drilled | OPEN FLOW Initial | OPEN FLOW Sept.1910 | ROCK PRESSURE Initial | ROCK PRESSURE Sept.1910 |
|---|---|---|---|---|---|---|---|
| McKean | 5 | E.Belt | May. 1910 | 800,000 | 672,000 | 475 | 485 |
| " | 2 | J.Jordan | Jun. 1910 | 811,908 | 466,000 | 800 | 840 |
| " | 1 | S.Elliott | Jun. 1910 | 500,000 | 892,064 | 510 | 445 |
| Liberty | 6 | M.Hawkins | Jun. 1910 | 1,500,000 | 1,572,000 | 620 | 670 |
| Eden | 1 | J.Thompson | Jun. 1910 | 2,500,000 | 2,535,300 | 800 | 470 |
| " | 1 | A.& E.Mills | Jul. 1910 | 2,225,000 | 2,208,000 | 625 | 485 |
| " | 2 | A.& E.Mills | Aug. 1910 | 1,225,000 | 1,572,000 | 615 | 560 |
| " | 1 | H.Penick | Jul. 1910 | 4,000,000 | 3,249,000 | 750 | 705 |
| " | 1 | W.Neiberger | Aug. 1910 | 750,000 | 716,000 | 625 | 655 |
| " | 1 | J.Moats | Aug. 1910 | 500,000 | 500,000 | 625 | 625 |
| " | 1 | J.Burtholder | Sep. 1910 | 500,000 | 500,000 | 500 | 500 |
| " | 1 | M.Vanostrand | Sep. 1910 | 1,000,000 | 1,000,000 | 655 | 655 |
| Clay | 1 | I.Miller | Oct. 1910 | 600,000 | 600,000 | 475 | 475 |
| Washington | 1 | E.Van Wey | Oct. 1910 | 600,000 | 600,000 | 715 | 715 |
| | TOTAL NORTH FIELD | | | 16,911,908 | 17,080,364 | | |

SOUTH FIELD

| Township | No. | Name | Date Drilled | OPEN FLOW Initial | OPEN FLOW Sept.1910 | ROCK PRESSURE Initial | ROCK PRESSURE Sept.1910 |
|---|---|---|---|---|---|---|---|
| Laurel | 1 | J.Bainter | Aug. 1910 | 3,167,000 | 3,000,000 | 560 | 560 |
| " | 1 | H.Pauble | Sep. 1910 | 1,500,000 | 736,432 | 800 | 800 |
| " | 1 | W.Moore | Oct. 1910 | 1,100,000 | 875,772 | 800 | 800 |
| | TOTAL SOUTH FIELD | | | 5,767,000 | 4,612,204 | | |
| | TOTAL BOTH FIELDS | | | 22,678,908 | 21,692,568 | | |

EXHIBIT O-2 SHEET 11

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1910

WELLS PULLED AND SOLD SINCE APRIL, 1910

NORTH FIELD

| Township | No. | Name | Date Drilled | 50# Service April, 1910 | Rock Press. April, 1910 | |
|---|---|---|---|---|---|---|
| Hennington | 1 | D.L.Van Fossen | Jan. 05 | 39,210 | 85 | Pulled |
| " | 2 | D.L.Van Fossen | Nov. 06 | 27,720 | 90 | Pulled |
| " | 1 | C.Dixon | Jun. 05 | 16,682 | 95 | Pulled |
| " | 2 | E.O.Squires | Oct. 06 | 70,260 | 110 | Pulled |
| " | 3 | E.O.Squires | Dec. 06 | 12,000 | 85 | Pulled |
| " | 1 | W.D.McClintick | May. 07 | 17,560 | 100 | Pulled |
| " | 2 | H.Shipley | Aug. 07 | 163,888 | 120 | Pulled |
| " | 1 | S.G.Hoover | Jul. 07 | 30,270 | 115 | Pulled |
| " | 3 | H.Hawkins | Sep. 08 | 52,416 | 90 | Sold |
| " | 1 | C.G.Houck | Jul. 07 | 27,720 | 115 | Pulled |
| Burlington | 1 | J.Patton | 08 | 192,120 | 170 | Will pull |
| McKean | 1 | C.Houck | Oct. 09 | 156,630 | 400 | Will pull |
| " | 1 | E.L.Jones | Aug. 06 | 301,048 | 300 | Pulled |
| Liberty | 1 | J.L.Belt | Sep. 05 | 10,000 | 140 | Will pull |
| Milford | 1 | D.Jaggers | Dec. 07 | 110,880 | 90 | Sold |
| " | 1 | L.C.Stoughton | Dec. 07 | 20,000 | 75 | Pulled |
| " | 2 | L.C.Stoughton | Jan. 08 | 85,940 | 90 | Pulled |
| " | 3 | L.C.Stoughton | Feb. 08 | 85,940 | 75 | Pulled |
| " | 4 | L.C.Stoughton | Sep. 08 | 34,950 | 80 | Pulled |
| " | 5 | L.C.Stoughton | Nov. 08 | 97,400 | 85 | Sold |
| | TOTAL NORTH FIELD | | | 1,562,634 | | |

SOUTH FIELD

| Township | No. | Name | Date Drilled | 50# Service April, 1910 | Rock. Press. April, 1910 | |
|---|---|---|---|---|---|---|
| Pleasant | 2 | B.F.Rugh | Jul. 08 | 15,000 | 60 | Pulled |
| Laurel | 1 | C.J.Goss | | 10,000 | 105 | Pulled |
| | TOTAL SOUTH FIELD | | | 25,000 | | |
| | TOTAL BOTH FIELDS | | | 1,577,634 | | |

# EXHIBIT O-3 SHEET 1

## GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

WELL RECORD REPORT

HOME FIELD — MUSKINGUM TWP., MORGAN CO. — SEPTEMBER, 1911.

| Well No. | Name | Acres | Date Drilled | Well Rent | PRESSURES Sept.1910 L. R. | PRESSURES Sept.1911 L. R. | CAPACITIES Sept.1910 Open Flow | CAPACITIES Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | E. Dunbould | 146 | Jan. 05 | $100.00 | 125 | 80 | 148 | 80,268 | 17,680 | Wet & salty - very weak |
| 2 | E. Dunbould | | Apr. 05 | 100.00 | 125 | 100 | 110 | 251,525 | 280,870 | Dry - in good condition |
| 3 | E. Dunbould | | Jan. 06 | 100.00 | 125 | 80 | 108 | 110,880 | 70,260 | Wet & salty |
| 1 | Mrs. Larmore | 35 | Feb. 08 | 50.00 | 100 | 60 | 100 | 85,940 | 21,480 | Dry salter - in bad condition |
| 1 | V. E. Douglass | 16 | Oct. 08 | 50.00 | 95 | 60 | 98 | 170,346 | 139,800 | Dry salter - in fair condition |
| 1 | V. E. Douglass | 80 | Jul. 09 | 50.00 | 220 | 60 | 180 | 70,260 | 60,348 | Dry salter - in fair condition |
| 1 | Meeker Heirs | 2 | Dec. 08 | 50.00 | 215 | 60 | 178 | 70,260 | 46,844 | Dry salter - in bad condition |
| | | | TOTAL HOME FIELD | | | | | 840,074 | 706,404 | |

EXHIBIT O-3 SHEET 2

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — BURLINGTON TWP. — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.1910 L | Sept.1910 R | Sept.1911 L | Sept.1911 R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | C. Stinson | 60 | 02 | $200.00 | 95 | 190 | 60 | 170 | 236,444 | 148,580 | Wet & salty - in fair condition |
| 1 | J. Dunlap | 135 | | 100.00 | 105 | 165 | 75 | 135 | 97,400 | 44,828 | Wet & very salty - leaks |
| 1 | C. Dunlap | 78 | | 100.00 | 110 | 160 | 70 | 145 | 506,252 | 246,500 | Wet & salty - in fair condition |
| 1 | A. J. Wilson | 40 | 02 | 100.00 | 95 | 160 | 60 | 145 | 241,472 | 139,800 | Dry - in fair condition |
| 2 | A. J. Wilson | 40 | Jan. 04 | 100.00 | 125 | 200 | 65 | 155 | 221,360 | 156,850 | Wet - leaks around tubing |
| 1 | N. Nash | 16 | | 100.00 | 120 | 230 | 90 | 220 | 163,688 | 97,400 | Mud in bottom - in fair condition |
| 1 | J. Beaty | 96 | 03 | 200.00 | 110 | 120 | 70 | 100 | 61,625 | 79,410 | Bad leak - plugged Sept. 1911 |
| 1 | R. Boyd (Edman) | 138 | Sep. 03 | 100.00 | 90 | 135 | 75 | 175 | 48,030 | 29,210 | Wet & muddy - in bad condition |
| 2 | R. Boyd (Edman) | | Jun. 04 | 100.00 | 90 | 165 | 90 | 180 | 121,080 | 65,340 | Wet & salty - siphoned |
| 1 | W. Edman | 44 | Sep. 03 | 100.00 | 105 | 150 | 70 | 140 | 546,072 | 315,640 | Very wet & salty - bad leak |
| 1 | R. A. Adams | 180 | Oct. 03 | 200.00 | 110 | 245 | 95 | 205 | 156,830 | 110,880 | Very wet & salty - siphoned |
| 1 | S. McNaughten | 114 | Mar. 04 | 100.00 | 95 | 195 | 70 | 220 | 97,400 | 148,320 | Wet - in fair condition |
| 1 | W. Neiburger | 50 | Aug. 04 | 200.00 | 95 | 210 | 115 | 165 | 67,670 | 29,210 | Very wet - weak |
| 1 | J. H. Conard | 208 | Jul. 05 | 200.00 | 115 | 295 | 60 | 245 | 414,000 | 315,660 | Very wet & salty |
| 1 | W. Williams | 78 | Jun. 06 | 200.00 | 95 | 255 | 115 | 195 | 139,800 | 221,360 | Very wet & salty - leaks |
| 2 | W. Williams | | Sep. 09 | 200.00 | 95 | 240 | 115 | 170 | 163,688 | 97,400 | Very wet & salty |
| 1 | G. Householder | 84 | Jul. 06 | 100.00 | 125 | 145 | 70 | 105 | 139,800 | 139,800 | Dry - in good condition |
| 2 | G. Householder | 84 | Aug. 06 | 100.00 | 125 | 140 | 70 | 110 | 146,320 | 88,940 | Dry - in good condition |
| 2 | J. Williams | 196 | Oct. 07 | 200.00 | 90 | 225 | 110 | 180 | 110,880 | 46,266 | Wet & salty |
| 3 | J. Williams | | Jan. 08 | 200.00 | 90 | 220 | 100 | 155 | 261,578 | 221,360 | Very wet & salty - leaks - in bad cond. |
| 1 | N. Winse | 78 | Oct. 08 | 200.00 | 105 | 280 | 75 | 250 | 261,578 | 156,650 | Dry - in fair condition |
| 2 | N. Winse | | Sep. 09 | 200.00 | 110 | 430 | 80 | 360 | 251,416 | 110,880 | Dry - in good condition |
| 1 | C. H. Haas | 197 | Feb. 09 | 200.00 | 85 | 300 | 100 | 165 | 170,946 | 70,010 | Wet & weak |
| 1 | Mrs. Wm. Neff | 43 | Apr. 09 | 200.00 | 120 | 265 | 100 | 210 | 427,000 | 241,472 | Dry - in good condition |
| 2 | Mrs. Wm. Neff | | Sep. 09 | 200.00 | 120 | 315 | 60 | 265 | 186,550 | 70,260 | Wet & salty - tubing leaks |
| 1 | J. R. Haas | 44 | Sep. 09 | 200.00 | 105 | 320 | 90 | 270 | 67,910 | 24,950 | Very wet & weak |
| | | | TOTAL BURLINGTON TOWNSHIP | | | | | | 5,256,379 | 3,428,370 | |

EXHIBIT O-3 SHEET 3
GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — McKEAN TWP. — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.1910 L | Sept.1910 R | Sept.1911 L | Sept.1911 R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S. S. Devinney | 100 | Feb. 06 | $200.00 | 165 | 475 | 110 | 460 | 1,366,480 | 1,130,268 | Dry - in good condition |
| 2 | S. & H. Devinney | 127 | Jun. 06 | 200.00 | 165 | 460 | 180 | 425 | 197,968 | 178,004 | Dry - in fair condition |
| 1 | D. & H. Ramey | 109 | Jul. 06 | 200.00 | 220 | 565 | 105 | 490 | 280,034 | 209,664 | Dry - in good condition |
| 2 | E. L. Jones | 333 | Feb. 07 | 200.00 | 195 | 300 | 115 | 285 | 48,030 | 231,416 | Revived - in good condition |
| 3 | E. L. Jones | | Mar. 07 | 100.00 | 215 | 330 | 115 | 280 | 324,760 | 205,816 | Dry - in good condition |
| 1 | M. Holler | 100 | Sep. 06 | 200.00 | 230 | 620 | 140 | 600 | 221,360 | 185,062 | Dry - in good condition |
| 1 | F. M. Brooks | 68 | Oct. 06 | 200.00 | 190 | 380 | 120 | 265 | 306,252 | 178,004 | Dry - in fair condition |
| 2 | F. M. Brooks | 186 | Nov. 06 | 200.00 | 175 | 235 | 120 | 190 | 511,908 | 197,968 | Very wet & salty - in bad condition |
| 3 | F. M. Brooks | | Apr. 07 | 200.00 | 195 | 210 | 120 | 160 | 350,670 | 78,410 | Very wet & salty - in bad condition |
| 4 | F. M. Brooks | | Mar. 08 | 100.00 | 175 | 190 | 120 | 150 | 221,360 | 121,080 | Very wet & salty - siphoned |
| 1 | P. C. Smith | 50 | Dec. 06 | 200.00 | 195 | 345 | 115 | 295 | 296,844 | 271,630 | Revived - in good condition |
| 1 | J. F. Holler | 96 | Jun. 07 | 100.00 | 195 | 300 | 180 | 255 | 116,500 | 139,800 | Revived - dry - in fair condition |
| 1 | C. R. Cramer (Smith) | 114 | Jun. 07 | 200.00 | 195 | 360 | 185 | 180 | 121,080 | 55,340 | Dry salter - in bad condition |
| 1 | J. B. Smith | 101 | Jul. 07 | 200.00 | 170 | 195 | 120 | 155 | 511,908 | 139,800 | Very wet & salty - siphoned |
| 1 | Mrs. D. M. Brooks | 32 | Aug. 07 | 100.00 | 180 | 180 | 190 | 195 | 110,880 | 156,630 | Revived - in good condition |
| 1 | Mrs. M. E. Downer | 142 | Aug. 07 | 100.00 | 170 | 235 | 150 | 195 | 131,260 | 85,940 | Wet & salty - siphoned |
| 2 | Mrs. M. E. Downer | | Oct. 07 | 100.00 | 170 | 320 | 140 | 195 | 382,340 | 156,630 | Wet & salty - in bad condition |
| 3 | Mrs. M. E. Downer | | Dec. 07 | 100.00 | 155 | 405 | 135 | 365 | 159,800 | 121,080 | Wet & salty - in fair condition |
| 1 | T. M. Brooks | 40 | Nov. 07 | 100.00 | 180 | 300 | 180 | 250 | 121,080 | 156,630 | Very wet & salty - in fair Cond.-siphoned |
| 1 | Mrs. J. M. Brister | 42 | Dec. 07 | 100.00 | 205 | 215 | 180 | 180 | 292,640 | 181,260 | Very wet & salty - in bad cond. -siphoned |
| 1 | J. Wince | 200 | Jun. 08 | 200.00 | 105 | 340 | 100 | 265 | 170,946 | 110,880 | Wet & salty - in fair condition |
| 2 | J. Wince | | May. 09 | 200.00 | 100 | 350 | 105 | 255 | 305,252 | 121,080 | Wet & salty - in fair condition |
| 3 | J. Wince | | Oct. 09 | 200.00 | 100 | 395 | 100 | 265 | 366,512 | 197,968 | Dry - salted - requires lots of water |
| 1 | S. W. Davis | 75 | Nov. 08 | 200.00 | 165 | 560 | 170 | 510 | 156,830 | 139,800 | Dry salter - in bad condition |
| 1 | D. Allender (Simpson) | 105 | Sep. 09 | 200.00 | 110 | 420 | 100 | 340 | 313,660 | 148,320 | Dry - in fair condition - packer leaks |
| 2 | D. Allender (Simpson) | | Apr. 10 | 200.00 | | 485 | 100 | 245 | 192,120 | 39,210 | Very wet & salty - in bad condition |
| 1 | E. Belt | 28 | Nov. 09 | 200.00 | 110 | 340 | 70 | 280 | 97,400 | 34,950 | Very weak - low min. pressure |
| 2 | E. Belt | | Dec. 09 | 200.00 | 100 | 385 | 80 | 160 | 292,640 | 121,080 | Dry - in good condition |
| 3 | E. Belt | | May. 10 | 200.00 | | 485 | 80 | 190 | 672,000 | 97,400 | Dry - in good condition |
| 1 | J. Jordan | 65 | Mar. 10 | 200.00 | | 545 | 170 | 365 | 776,000 | 221,360 | Wet - in fair condition |
| 2 | J. Jordan | | Jun. 10 | 200.00 | | 540 | 170 | 290 | 466,000 | 156,630 | Dry - in good condition |
| 1 | S. Elliott | 90 | Jun. 10 | 400.00 | | 465 | 105 | 200 | 682,064 | 139,800 | Wet - some oil - in fair condition |
| 1 | Van Warner | 80 | May. 11 | 200.00 | | | | 635 | | 251,626 | Dry - in good condition |
| | | | TOTAL McKEAN TOWNSHIP | | | | | | 10,753,578 | 5,909,256 | |

EXHIBIT O-3 SHEET 4

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — GRANVILLE TWP. — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.1910 L | Sept.1910 R | Sept.1911 L | Sept.1911 R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J. Ransower | 100 | Jul. 07 | $100.00 | 240 | 150 | 100 | 175 | 95,585 | 110,880 | Very wet & salty - siphoned |
| 1 | J. Warner | 105 | Nov. 07 | 100.00 | 225 | 240 | 95 | 145 | 70,260 | 21,480 | Very weak - in bad condition |
| 1 | Wm. Owens | 113 | Jan. 08 | 200.00 | 225 | 235 | 180 | 185 | 313,660 | 156,830 | Wet - in fair condition |
| 1 | O. Miller | 100 | Feb. 08 | 100.00 | 230 | 300 | 100 | 220 | 121,080 | 382,340 | In fair condition |
| 1 | K. Pence | 50 | Apr. 08 | 200.00 | 200 | 210 | 180 | 175 | 246,500 | 85,940 | Very wet & salty - siphoned |
| 2 | K. Pence | 70 | Aug. 08 | 200.00 | 220 | 215 | 180 | 185 | 197,966 | 85,940 | Very wet & salty - siphoned |
| 1 | D. R. Owens | 22 | Jun. 08 | 100.00 | 195 | 225 | 185 | 175 | 110,880 | 70,260 | Wet - siphoned - in fair condition |
| 1 | D. R. Owens | | Sep. 08 | 200.00 | 160 | 270 | 185 | 205 | 376,009 | 313,660 | Dry - in good condition |
| 2 | D. R. Owens | | Sep. 08 | 200.00 | 160 | 250 | 185 | 200 | 85,940 | 156,830 | Wet & salty - siphoned |
| 1 | W. Crooks | 100 | Jul. 08 | 100.00 | 160 | 250 | 185 | 420 | 367,007 | 241,472 | Dry - in good condition |
| 2 | W. Crooks | | Oct. 09 | 200.00 | 170 | 500 | 185 | 310 | 414,000 | 170,944 | Dry salter - in fair condition |
| 1 | M. Goodrich | 200 | Jul. 08 | 100.00 | 200 | 385 | 185 | 340 | 280,034 | 185,062 | In fair condition |
| 2 | M. Goodrich | | Nov. 09 | 100.00 | 175 | 435 | 190 | 340 | 692,064 | 759,000 | In good condition |
| 1 | T. Richards | 200 | Jul. 09 | 200.00 | 195 | 540 | 185 | 460 | 602,000 | 440,000 | Dry salter - in fair condition |
| 1 | W. H. Wilson | 92 | Nov. 09 | 200.00 | 175 | 445 | 185 | 395 | | | |
| | | | TOTAL GRANVILLE TOWNSHIP | | | | | | 4,205,725 | 3,180,640 | |

EXHIBIT O-3 SHEET 5

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — WASHINGTON TWP. — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.1910 L | Sept.1910 R | Sept.1911 L | Sept.1911 R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Wm. Vance | 1 | 02 | $100.00 | 90 | 150 | 70 | 140 | 121,060 | 68,940 | Dry - in good condition |
| 2 | Wm. Vance | 1 | 05 | 100.00 | 95 | 185 | 75 | 175 | 110,680 | 226,366 | Dry - in good condition - revived |
| 1 | W. W. Reynolds | 80 | May. 05 | 100.00 | 95 | 250 | 105 | 195 | 39,210 | 39,210 | Wet & Salty - in bad condition |
| 1 | A. J. Stanton | 5 | Jun. 05 | 200.00 | 90 | 210 | 65 | 220 | 121,060 | 221,360 | Very wet & salty - revived |
| 1 | B. Williams | 260 | Mar. 06 | 200.00 | 95 | 295 | 80 | 210 | 256,444 | 178,004 | Wet - in fair condition |
| 2 | B. Williams | | Sep. 05 | 200.00 | 100 | 285 | 85 | 265 | 97,400 | 42,862 | Wet & salty |
| 1 | H. Bell | 110 | Apr. 06 | 200.00 | 105 | 305 | 80 | 210 | 110,680 | 76,310 | Very wet & salty - siphoned |
| 1 | C. Roberts | 152 | Aug. 08 | 100.00 | 110 | 205 | 85 | 170 | 271,630 | 156,880 | Dry - in fair condition |
| 2 | C. Roberts | | Aug. 08 | 100.00 | 120 | 255 | 90 | 175 | 156,630 | 97,400 | Wet - in fair condition |
| 3 | C. Roberts | | Jul. 09 | 200.00 | 115 | 270 | 90 | 175 | 716,000 | 801,048 | Wet & very salty - leaks |
| 1 | S. L. Haas | 115 | Dec. 08 | 200.00 | 135 | 315 | 90 | 170 | 288,438 | 68,940 | Very wet & salty |
| 2 | S. L. Haas | | Feb. 09 | 100.00 | 135 | 360 | 95 | 255 | 582,340 | 156,880 | Dry salter - in fair condition |
| 3 | S. L. Haas | | Mar. 09 | 100.00 | 120 | 245 | 90 | 155 | 110,680 | 68,940 | Wet & salty |
| 4 | S. L. Haas | | May. 09 | 100.00 | 150 | 430 | 90 | 220 | 156,630 | 70,260 | Dry - in good condition |
| 5 | S. L. Haas | | Jun. 09 | 200.00 | 130 | 425 | 85 | 245 | 139,800 | 68,940 | Wet & salty - in fair condition |
| 1 | D. Erwin | 53 | Aug. 09 | 200.00 | 115 | 470 | 70 | 265 | 800,972 | 221,360 | Dry - in fair condition |
| 2 | D. Erwin | | Dec. 09 | 200.00 | 120 | 475 | 75 | 275 | 1,480,000 | 336,868 | Dry - in good condition |
| 1 | J. & S. Haas | 99 | Oct. 09 | 200.00 | 105 | 210 | 90 | 250 | 121,080 | 97,400 | Wet - in fair condition |
| 2 | J. & S. Haas | | Dec. 09 | 200.00 | 105 | 295 | 70 | 185 | 271,630 | 68,940 | Very wet & salty |
| 1 | A. J. Wilson | 566 | Feb. 10 | 100.00 | 100 | 480 | 80 | 280 | 97,400 | 58,210 | Wet - in bad condition - weak |
| 2 | A. J. Wilson | | Jan. 11 | 200.00 | | | 80 | R.400 | | 156,880 | Oil well - can't shut in for R.P. |
| 1 | E. Van Wey | 96 | Oct. 10 | 200.00 | | 715 | 65 | 575 | 600,000 | 209,664 | Salty - in fair condition |
| 2 | E. Van Wey | | Feb. 11 | 200.00 | | | 85 | 570 | | 256,552 | Some oil - wet & salty |
| 1 | S. E. Stickle | 80 | Aug. 11 | 200.00 | | | | 455 | | 414,000 | In good condition |
| | | | TOTAL WASHINGTON TOWNSHIP | | | | | | 6,430,804 | 5,716,600 | |

**EXHIBIT O-3 SHEET 6**

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — LIBERTY TWP. — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | PRESSURES Sept.1910 L | Sept.1910 R | Sept.1911 L | Sept.1911 R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | P. J. Brooks | 175 | Mar. 05 | $100.00 | 165 | 185 | 150 | 180 | 24,600 | 42,736 | Very wet & salty - very weak |
| 2 | P. J. Brooks | | May. 05 | 100.00 | 150 | 220 | 150 | 210 | 146,320 | 170,946 | Wet - siphoned - in fair cond. |
| 2 | C. Slife | 191 | Jan. 07 | 200.00 | 105 | 315 | 150 | 290 | 170,940 | 156,650 | In good condition |
| 1 | M. A. Barber | 90 | May. 07 | 200.00 | 125 | 320 | 150 | 285 | 178,004 | 139,800 | Dry - in good condition |
| 1 | M. Hawkins | 124 | Oct. 09 | 100.00 | 205 | 450 | 150 | 335 | 1,130,288 | 670,000 | Dry - in good condition |
| 2 | M. Hawkins | | Dec. 09 | 100.00 | 205 | 500 | 150 | 425 | 215,512 | 156,850 | Very wet & salty |
| 3 | M. Hawkins | | Jan. 10 | 100.00 | 210 | 580 | 150 | 445 | 873,000 | 477,820 | Dry - in good condition |
| 4 | M. Hawkins | | Apr. 10 | 200.00 | 250 | 590 | 160 | 475 | 1,117,000 | 620,000 | Dry - in good condition |
| 5 | M. Hawkins | 65 | Jun. 10 | 200.00 | | 625 | 160 | 575 | 1,572,000 | 717,000 | Dry - in good condition |
| 2 | J. Rhodeback | 153 | Apr. 10 | 200.00 | | 670 | 150 | 440 | 576,244 | 163,888 | Dry - in good condition |
| | | | TOTAL LIBERTY TOWNSHIP | | | | | | 6,007,908 | 5,618,852 | |

EXHIBIT O-3 SHEET 7

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

## WELL RECORD REPORT

NORTH FIELD — KNOX TOWNSHIP — SEPTEMBER, 1911.

| Well No. | Name | Acres | When Drilled | Well Rent | Pressures Sept.1910 L | Pressures Sept.1910 R | Pressures Sept.1911 L | Pressures Sept.1911 R | Capacities Sept.1910 Open Flow | Capacities Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J. Thompson | 52 | Jun. 10 | $200.00 | | 470 | | 180 | 2,533,300 | E. 200,000 | Salty - in fair condition |
| 1 | A. & E. Mills | 78 | Jul. 10 | 200.00 | | 465 | 65 | 215 | 2,208,000 | 528,440 | Salty - in fair condition |
| 2 | A. & E. Mills | | Aug. 10 | 200.00 | | 560 | 75 | 240 | 1,572,000 | 271,650 | Salty - watered frequently |
| 1 | H. Penick | 3 | Jul. 10 | 200.00 | | 705 | 65 | 255 | 3,249,000 | 271,650 | Wet & salty |
| 1 | W. Heilberger | 30 | Aug. 10 | 200.00 | | 665 | 60 | 205 | 716,000 | 78,160 | Very wet |
| 1 | J. Moats | 90 | Aug. 10 | 200.00 | | 625 | 60 | 180 | 500,000 | 97,400 | Makes oil - salty |
| 1 | J. Burkholder | 129 | Sep. 10 | 200.00 | | 500 | 65 | 240 | 500,000 | 87,864 | Very weak - in fair condition |
| 1 | M. Vanostrand | 106 | Sep. 10 | 200.00 | | 655 | 65 | 320 | 1,000,000 | 209,664 | Salty - in fair condition |
| 2 | M. Vanostrand | | Feb. 11 | 200.00 | | | 65 | 215 | | 192,120 | Very salty & wet |
| 1 | G. Tavener | 109 | Jun. 11 | 200.00 | | | | 700 | | 1,730,688 | Leaking little at packer |
| 1 | E. Swick | 210 | Jul. 11 | 200.00 | | | | 705 | | 982,344 | In good condition |
| 1 | G. Wheeler (Mothers) | 180 | Jul. 11 | 200.00 | | | | 700 | | 910,000 | Little wet & salty |
| 1 | E. Stilwell | 119 | Sep. 11 | 200.00 | | | | 700 | | 186,000 | Shut well |
| 1 | M. Myers | 155 | Sep. 11 | 200.00 | | | | 650 | | 3,888,000 | In good condition |
| 1 | H. B. Oldaker | | Sep. 11 | 200.00 | | | | 680 | | 2,358,000 | In good condition |
| 1 | W. M. Jones | | Sep. 11 | 200.00 | | | | 700 | | 780,000 | In good condition |
| | | | TOTAL KNOX TOWNSHIP | | | | | | 12,276,300 | 12,476,890 | |

MORGAN TWP., KNOX CO.

| Well No. | Name | Acres | When Drilled | Well Rent | Pressures Sept.1910 L | Pressures Sept.1910 R | Pressures Sept.1911 L | Pressures Sept.1911 R | Capacities Sept.1910 Open Flow | Capacities Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | H. Bell | 63 | Feb. 10 | $415.00 | 100 | 415 | 80 | 180 | 382,340 | 55,340 | Very wet - in bad cond.- will plug |
| | | | TOTAL MORGAN TOWNSHIP | | | | | | 479,740 | 55,340 | |

CLAY TWP., KNOX CO.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | I. Miller | 76 | Oct. 10 | $200.00 | | 475 | 65 | 225 | 600,000 | 139,800 | Caving - in bad condition |

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# EXHIBIT O-3 SHEET 8

## GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

ANALYSIS OF WELL REPORT — SEPTEMBER, 1911.

| Location Township & Field | Wells producing last report | Wells producing last report not reported this report | Wells producing last report now producing | New Wells now producing first time reported | Wells now producing | Production that was estimated | Average Capacity | Open Flow Total Capacity | Maximum Rock Pressure | Minimum Rock Pressure | Mean Rock Pressure |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bennington | 7 | 0 | 7 | 0 | 7 | | 101,000 | 706,404 | 180 | 95 | 153 |
| Burlington | 28 | 2 | 26 | 0 | 26 | | 154,000 | 3,488,870 | 270 | 120 | 173 |
| Hebron | 32 | 0 | 32 | 1 | 33 | | 180,000 | 5,809,256 | 458 | 140 | 284 |
| Granville | 16 | 2 | 14 | 0 | 14 | | 227,000 | 3,180,640 | 450 | 140 | 284 |
| Washington | 21 | 0 | 21 | 3 | 24 | | 156,000 | 3,716,580 | 435 | 140 | 344 |
| Liberty | 10 | 0 | 10 | 0 | 10 | | 324,000 | 3,238,682 | 575 | 180 | 447 |
| Eden | 8 | 0 | 8 | 8 | 16 | 800,000 | 780,000 | 12,476,890 | 725 | 180 | 120 |
| Morgan | 2 | 1 | 1 | 0 | 1 | | 96,340 | 96,340 | 120 | 120 | 120 |
| Clay | 1 | 0 | 1 | 0 | 1 | | 139,800 | 139,800 | 225 | 225 | 225 |
| North Field | 125 | 5 | 120 | 12 | 132 | 800,000 | 251,000 | 33,129,252 | 725 | 95 | 270 |
| Liberty | 6 | 0 | 6 | 1 | 7 | 40,000 | 96,480 | 668,360 | 130 | 70 | 91 |
| Pleasant | 14 | 3 | 11 | 0 | 11 | 200,000 | 100,000 | 1,186,775 | 300 | 70 | 135 |
| Good Hope | 6 | 1 | 5 | 0 | 5 | | 248,000 | 1,303,179 | 80 | 60 | 69 |
| Jacksonburg | 16 | 2 | 14 | 1 | 28 | | 339,000 | 9,649,288 | 430 | 70 | 195 |
| SOUTH FIELD | 42 | 6 | 36 | 15 | 51 | 240,000 | 250,000 | 12,674,739 | 430 | 60 | 155 |
| TOTAL NORTH & SOUTH FIELDS | 167 | 11 | 156 | 27 | 183 | 440,000 | 250,000 | 45,803,991 | 725 | 60 | 225 |

# EXHIBIT O-3 SHEET 9

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. SEPT. 1911

WELLS DRILLED SINCE SEPTEMBER, 1910 - FIRST TIME REPORTED

NORTH FIELD

| Township | No. | Name | Date Drilled | OPEN FLOW Initial | OPEN FLOW Sept.1911 | ROCK PRESSURE Initial | ROCK PRESSURE Sept.1911 |
|---|---|---|---|---|---|---|---|
| McKean | 1 | Van Warner | May.1911 | 280,000 | 251,524 | 640 | 635 |
| Washington | 2 | A. J. Wilson | Jan.1911 | 365,726 | 156,830 | 430 | 400 |
| Washington | 2 | E. Van Wey | Feb.1911 | 1,084,000 | 256,562 | 630 | 570 |
| Washington | 1 | S. Stickle | Aug.1911 | 340,000 | 434,000 | 440 | 435 |
| Allen | 2 | M. Vanostrand | Feb.1911 | 750,000 | 192,120 | 420 | 415 |
| " | 1 | O. Zavener | Jan.1911 | 2,000,000 | 1,730,625 | 737 | 700 |
| " | 1 | E. Swick | Jul.1911 | 800,000 | 982,344 | 735 | 705 |
| " | 1 | G. Wheeler | Jul.1911 | 1,800,000 | 910,000 | 705 | 700 |
| " | 1 | E. Stilwell | Sep.1911 | 280,000 | 156,000 | 700 | 700 |
| " | 1 | M. Myers | Sep.1911 | 5,800,000 | 5,886,000 | 650 | 650 |
| " | 1 | E. Oldaker | Sep.1911 | 2,300,000 | 2,366,000 | 650 | 650 |
| " | 1 | W. Jones | Sep.1911 | 750,000 | 750,000 | 600 | 600 |
| | TOTAL NORTH FIELD | | | 14,157,726 | 12,046,000 | | |

SOUTH FIELD

| Township | No. | Name | Date Drilled | OPEN FLOW Initial | OPEN FLOW Sept.1911 | ROCK PRESSURE Initial | ROCK PRESSURE Sept.1911 |
|---|---|---|---|---|---|---|---|
| Liberty | 1 | Hanna | Feb.1911 | 400,000 | 55,340 | 180 | 75 |
| Laurel | 2 | S. Ogle | Dec.1910 | 7,000,000 | 855,000 | 300 | 240 |
| " | 2 | H. Pumble | Nov.1910 | 500,000 | 221,360 | 310 | 165 |
| " | 1 | P. Sater | Nov.1910 | 750,000 | 186,830 | 240 | 130 |
| " | 2 | P. Sater | Jan.1911 | 300,000 | 97,400 | 220 | 140 |
| " | 3 | P. Sater | Jan.1911 | 300,000 | 170,944 | 220 | 100 |
| " | 1 | Welch | Jan.1911 | 1,225,000 | 357,007 | 350 | 290 |
| " | 1 | L. Friend | Jan.1911 | 1,500,000 | 511,908 | 350 | 300 |
| " | 2 | L. Friend | Jul.1911 | 600,000 | 313,640 | 318 | 250 |
| " | 1 | A. Vorhees | Feb.1911 | 1,000,000 | 221,540 | 400 | 340 |
| " | 1 | S. Kuhn | Jun.1911 | 2,000,000 | 800,972 | 380 | 300 |
| " | 1 | W. Bingham | Jun.1911 | 1,100,000 | 398,665 | 312 | 210 |
| " | 1 | W. Zemmerhaver | Jun.1911 | 1,500,000 | 1,467,940 | 420 | 380 |
| " | 1 | S. Miller | Aug.1911 | 350,000 | 251,526 | 360 | 350 |
| " | 1 | I. Quillen | Sep.1911 | 1,800,000 | 1,366,480 | 450 | 430 |
| | TOTAL SOUTH FIELD | | | 20,225,000 | 7,256,592 | | |
| | TOTAL BOTH FIELDS | | | 34,382,726 | 19,282,592 | | |

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# EXHIBIT O-3 SHEET 10

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1911.

WELLS PULLED AND GOLD SINCE SEPTEMBER, 1910.

NORTH FIELD

| Township | No. | Name | Date Drilled | Open Flow Sept.1910 | Rock Press. Sept. 1910 | Date Pulled |
|---|---|---|---|---|---|---|
| Burlington | 1 | A. Chamell | 02 | 110,880 | 138 | Jun.1911 |
| " | 1 | A. Patton | | 46,080 | 155 | Jun.1911 |
| Granville | 2 | J. Ransower | Oct. 07 | 42,736 | 145 | Apr.1911 |
| " | 2 | J. Warner | Dec. 07 | | 160 | Apr.1911 |
| Morgan | 1 | H. Bell | Dec. 09 | 97,400 | 160 | May.1911 |
| | TOTAL NORTH FIELD | | | 299,040 | | |

SOUTH FIELD

| Township | No. | Name | Date Drilled | Open Flow Sept.1910 | Rock Press. Sept. 1910 | Date Pulled |
|---|---|---|---|---|---|---|
| Pleasant | 1 | R. Zain | Aug. 07 | 87,670 | 110 | May.1911 |
| Good Hope | 1 | D. & L. Weltner | | 24,600 | 90 | Mar.1911 |
| Laurel | 2 | T. Forbess | Oct. 08 | 61,625 | 220 | Feb.1911 |
| " | 1 | J. Painter | Aug. 10 | E. 5,000,000 | 560 (Line Well) | Feb.1911 |
| Pleasant | 1 | E. Beery | Jan. 07 | 42,988 | 65 | Sep.1911 |
| " | 2 | E. Beery | Nov. 07 | 70,260 | 125 | Sep.1911 |
| | TOTAL SOUTH FIELD | | | 5,307,037 | | |

TOTAL SOUTH FIELDS 5,606,085

EXHIBIT O-3 SHEET 11

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY SEPT. 1911

## WELL RECORD REPORT

OTHER COMPANIES — SEPTEMBER, 1911.

### UTICA COMPANY

| Well No. | Name | PRESSURES Sept.1910 L | R | Sept.1911 L | R | CAPACITIES Sept.1910 Open Flow | Sept.1911 Open Flow | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | Bencar | | | 60 | | 2,000,000 | 110,880 | Dry - in good condition |
| 1 | Hobbs | | | 60 | | 1,500,000 | 203,816 | Dry - in fair condition |
| | TOTAL UTICA COMPANY | | | | | 3,500,000 | 314,696 | |

### GRAHAM & PEARSALL

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | J. S. Graham | | | 95 | 600 | | 740,000 | In good condition |
| 3 | J. S. Graham | | | 95 | 505 | | 362,340 | In good condition |
| 4 | J. S. Graham | | | 105 | 475 | | 511,908 | In good condition |
| 5 | J. S. Graham | | | | 870 | | 670,000 | In good condition |
| 6 | J. S. Graham | | | | 550 | | 1,205,000 | In good condition |
| | Total. GRAHAM & PEARSALL | | | | | | 3,509,248 | |

### BALTIMORE COMPANY

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | Myers | 85 | 105 | 75 | 100 | 103,500 | 42,758 | In good condition |
| 1 | E. Wagner | 85 | 190 | 75 | 125 | 324,760 | 178,004 | Dry salter |
| 1 | C. Marelin | 85 | 590 | 75 | 525 | 324,760 | 185,062 | Wet & salty |
| 1 | F. Wagner | | | 75 | 125 | 3,000,000 | 110,880 | Wet & salty |
| 2 | F. Wagner | | | 75 | 150 | 2,000,000 | 121,080 | Wet & salty |
| | Total, BALTIMORE COMPANY | | | | | 5,836,960 | 437,764 | |

### RUSHVILLE COMPANY

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | W. Wykoff | 100 | 240 | 80 | 160 | 350,670 | 362,340 | Shows oil |

### WEST RUSHVILLE COMPANY

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | J. Kennedy | 95 | 240 | 80 | 200 | 156,830 | 670,000 | Shows oil |
| 1 | A. Friesner | 95 | 470 | 140 | 260 | 266,604 | 185,062 | Wet & salty |
| | Total, W.RUSHVILLE COMPANY | | | | | 423,434 | 855,062 | |

| | | | |
|---|---|---|---|
| TOTAL, LOCAL COMPANIES | | 9,839,064 | 5,699,110 |

EXHIBIT O-4 SHEET 1

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

# WELL RECORD REPORT

NORTH FIELD — BENNINGTON Twp - LICKING CO. — OCTOBER 1912

| WELL NO | NAME | ACRES | WHEN DRILLED | WELL RENT | PRESSURES SEPT 1911 | PRESSURES OCT 1912 | CAPACITIES SEPT 1911 OPEN | CAPACITIES OCT. 1912 FLOW | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | W. H. Douglas | 16 | Oct 08 | Free gas | 95 | 80 | 139,800 | 70,260 | Dry - salter |
| 1 | W. H. Douglas | 50 | Jul 09 | " " | 180 | 125 | 60,368 | 50,000 | " " |
| 1 | Meachem Hrs. | 2 | Dec 08 | " " | 175 | 140 | 46,266 | 44,502 | " " |
| | | | TOTAL BENNINGTON TWP. | | | | 706,404 | 164,762 | |

BURLINGTON TWP - LICKING CO.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | J. Dunlap | 140 | | 100.00 | 135 | 140 | 44,502 | 280,000 | Revived - in good condition |
| 1 | G. Dunlap | 231 | | 100.00 | 135 | 135 | 246,500 | 170,946 | Wet - in fair condition |
| 1 | A. J. Wilson | 40 | 02 | 100.00 | 165 | 145 | 139,800 | 97,400 | " " " " |
| 2 | A. J. Wilson | 40 | Jan 04 | 100.00 | 155 | 150 | 156,830 | 139,800 | " " " " |
| 1 | H. Bash (Hunter) | 16 | | 50.00 | 220 | *185 | 97,400 | 251,526 | Revived - in fair condition |
| 1 | R. Boyd (Edman) | 138 | Sep 03 | 50.00 | 175 | 165 | 39,210 | 49,556 | Wet and weak |
| 2 | R. Boyd (Edman) | | Jun 04 | 50.00 | 150 | 155 | 55,340 | 139,800 | Siphoned - in fair cond. |
| 1 | R. A. Adams | 120 | Oct 03 | 50.00 | 205 | 195 | 110,880 | 110,880 | " " " " |
| 2 | S. McNaughten | 114 | Mch 04 | 100.00 | 220 | 200 | 148,320 | 97,400 | Wet - In fair condition |
| 1 | J. H. Conrad | 208 | Jul 05 | 150.00 | 265 | 190 | 513,660 | 251,526 | Siphoned - in fair cond. |
| 1 | W. Williams | 75 | Jun 06 | 200.00 | 195 | 150 | 221,360 | 50,000 | Wet - in fair condition |
| 1 | G. Householder | 54 | Jul 06 | 50.00 | 105 | 125 | 139,800 | 121,080 | Dry - in good condition |
| 2 | O. Householder | 84 | Aug 06 | 50.00 | 110 | 125 | 85,940 | 85,940 | " " " " |
| 2 | J. Williams | 196 | Oct 07 | 100.00 | 150 | 120 | 46,266 | 27,720 | Wet and salty. |
| 3 | J. Williams | | Jan 08 | 100.00 | 155 | 135 | 221,360 | 97,400 | Wet and salty. |
| 1 | H. Wince | 73 | Oct 08 | 100.00 | 250 | 170 | 156,830 | 27,720 | Wet and salty - weak. |
| 1 | Mrs. Wm Neff | 43 | Apr 09 | 100.00 | 210 | 135 | 241,472 | 121,080 | Wet - In fair condition. |
| 2 | Mrs. Wm Neff | | Sep 09 | 100.00 | 245 | 180 | 70,260 | 70,260 | Wet - In fair condition. |
| 1 | J. R. Haas | 43 | Sep 09 | 100.00 | 270 | 235 | 34,950 | 24,600 | Wet - In fair condition |
| | | | TOTAL BURLINGTON TWP. | | | | 3,428,570 | 2,214,634 | |

# WELL RECORD REPORT

NORTH FIELD — MCKEAN TWP - LICKING CO. — OCTOBER 1912

| WELL NO. | NAME | ACRES | WHEN DRILLED | WELL FEET | PRESSURES SEPT 1911 | PRESSURES OCT 1912 | CAPACITIES SEPT 1911 OPEN | CAPACITIES OCT 1912 FLOW | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | S. S. Devinney | 100 | Feb 06 | 200.00 | 460 | 420 | 1,130,886 | 1,113,000 | Dry - In good condition |
| 2 | S. & H. Devinney | 127 | Jun 06 | 200.00 | 425 | 400 | 178,004 | 215,512 | Siphoned - in fair cond. |
| 1 | D. & H. Ramey | 109 | Jul 06 | 100.00 | 490 | 425 | 209,664 | 139,800 | Dry - In good condition |
| 2 | E. L. Jones | 333 | Feb.07 | 200.00 | 235 | 200 | 231,416 | 185,062 | Dry - In good condition. |
| 3 | E. L. Jones | | Mch 07 | 100.00 | 280 | 250 | 203,816 | 197,968 | In fair condition |
| 1 | M. Holler | 100 | Sep 06 | 100.00 | 600 | 550 | 185,062 | 148,320 | Dry - in good condition |
| 1 | F. M. Brooks | 68 | Oct 06 | 50.00 | 265 | 210 | 178,004 | 197,968 | Wet - in fair condition |
| 2 | F. M. Brooks | 186 | Nov 06 | 100.00 | 190 | 185 | 197,968 | 296,844 | Wet - in fair condition |
| 3 | F. M. Brooks | | Apr 07 | 50.00 | 160 | 160 | 78,410 | 139,800 | Wet - in fair condition |
| 4 | F. M. Brooks | | Mch 08 | 100.00 | 150 | 150 | 121,080 | 139,800 | Wet - in fair condition |
| 1 | F. C. Smith | 50 | Dec 06 | 200.00 | 295 | 320 | 271,650 | 258,000 | Wet and salty |
| 1 | J. F. Holler | 96 | Jun 07 | 100.00 | 255 | 215 | 139,800 | 139,800 | Drowned out - will plug |
| 1 | C. R. Cramer (Smith) | 114 | Jun 07 | 50.00 | 180 | 320 | 55,340 | 175,000 | Dry - salter |
| 1 | J. B. Smith | 101 | Jul 07 | 100.00 | 155 | 150 | 139,800 | 241,472 | Siphoned - in fair cond. |
| 1 | Mrs. D. M. Brooks | 32 | Aug 07 | 100.00 | 195 | 175 | 156,830 | 185,062 | In good condition |
| 1 | Mrs. M. E. Downer | 142 | Aug 07 | 50.00 | 195 | 180 | 85,940 | 70,260 | Wet - in fair condition |
| 2 | Mrs. M. E. Downer | | Oct.07 | 50.00 | 195 | 260 | 156,830 | 221,360 | Wet - in fair condition |
| 3 | Mrs. M. E. Downer | | Dec 07 | 50.00 | 365 | 320 | 121,080 | 85,940 | Wet - in fair condition |
| 1 | T. M. Brooks | 40 | Nov 07 | 100.00 | 250 | 225 | 156,830 | 156,830 | Wet - in fair cond. Siphoned. |
| 1 | Mrs. J. M. Brister | 42 | Dec 07 | 50.00 | 180 | 165 | 131,260 | 85,940 | " " " " |
| 1 | J. Wince | 200 | Jun 08 | 100.00 | 265 | 205 | 110,880 | 85,940 | Wet - in fair condition. |
| 2 | J. Wince | | May 09 | 100.00 | 255 | 180 | 121,080 | 70,760 | Wet - in fair condition. |
| 3 | J. Wince | | Oct 09 | 100.00 | 265 | 185 | 197,968 | 139,800 | " " " |
| 1 | S. W. Davis | 75 | Nov 08 | 100.00 | 510 | 530 | 139,800 | 139,800 | Wet-Salty-in fair cond. |
| 1 | D. Allender (Simpson) | 105 | Sep 09 | 50.00 | 240 | 150 | 148,320 | 110,880 | Wet - in fair condition. |
| 2 | E. Belt | 28 | Dec 09 | 50.00 | 160 | 125 | 121,080 | 85,940 | " " " " |
| 3 | E. Belt | | May 10 | 50.00 | 190 | 165 | 97,400 | 30,270 | Dry - in good condition. |
| 1 | J. Jordan | 65 | Mch 10 | 100.00 | 365 | 285 | 221,360 | 197,968 | Wet - in fair condition. |
| 2 | J. Jordan | | Jun 10 | 100.00 | 290 | 135 | 156,830 | 97,400 | Wet - in fair condition. |
| 1 | S. Elliott | 90 | Jun 10 | 100.00 | 200 | 150 | 139,800 | 97,400 | " " " " |
| 1 | Van Warner | 80 | May 11 | 200.00 | 635 | 470 | 251,526 | 97,400 | Dry - in good condition. |
| 1 | S. Hand | 42 | Jan 12 | 100.00 | 400 | 400 | | 34,950 | Wet - " fair " |
| 1 | S. N. Anderson | 300 | Feb 12 | 200.00 | | 500 | | 405,560 | In good condition |
| 1 | A. Stinger | 100 | Oct 12 | 200.00 | | 570 | | 900,000 | In good condition. |
| | | | TOTAL MCKEAN TWP. | | | | 5,909,256 | 6,887,306 | |

**EXHIBIT O-4 SHEET 2**

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY OCT. 1912

EXHIBIT O-4 SHEET 3

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

# WELL RECORD REPORT

NORTH FIELD — GRANVILLE TWP - LICKING CO. — OCTOBER 1912

| WELL NO | NAME | ACRES | WHEN DRILLED | WELL RENT | PRESSURES SEPT 1911 | PRESSURES OCT 1912 | CAPACITIES SEPT 1911 OPEN | CAPACITIES OCT. 1912 FLOW | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Wm. Owens | 113 | Jan 08 | 150.00 | 165 | 155 | 156,830 | 49,556 | Wet - in bad condition. |
| 1 | G. Miller | 100 | Feb 08 | 100.00 | 220 | 190 | 382,340 | 70,260 | Wet - in bad condition. |
| 1 | K. Pence | 50 | Apr 08 | 150.00 | 175 | 150 | 85,940 | 121,080 | Siphoned - In fair condition |
| 2 | K. Pence | 70 | Aug 08 | 100.00 | 186 | 155 | 85,940 | 246,500 | " In good condi. |
| 1 | D. R. Owens | 22 | Jun 08 | 100.00 | 175 | 150 | 70,260 | 49,556 | " In fair condi. |
| 2 | D. R. Owens | | Sep 08 | 125.00 | 205 | 210 | 313,660 | 170,446 | Wet - In fair condition. |
| 1 | W. Crooks | 100 | Jul 08 | 100.00 | 200 | 205 | 156,830 | 110,880 | Siphoned-wet and salty |
| 2 | W. Crooks | | Oct 09 | 200.00 | 420 | 375 | 241,472 | 156,830 | Dry - in good condition. |
| 1 | M. Goodrich | 200 | Jul 08 | 100.00 | 310 | 295 | 170,946 | 110,880 | Wet - in fair condition. |
| 2 | M. Goodrich | | Nov 09 | 100.00 | 340 | 300 | 185,062 | 97,400 | Wet and salty |
| 1 | T. Richards | 200 | Jul 09 | 200.00 | 480 | 440 | 759,000 | 477,820 | Wet and salty-In fair cond. |
| 1 | W. H. Wilson | 100 | Nov 09 | 100.00 | 395 | 380 | 440,000 | 313,660 | In good cond. |
| | | | TOTAL GRANVILLE TWP. | | | | 3,180,640 | 1,975,378 | |

WASHINGTON TWP - LICKING CO.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Wm. Vance | 1 | | 02 100.00 | 140 | 150 | 85,940 | 49,000 | In fair condition. |
| 2 | Wm. Vance | 1 | | 03 100.00 | 175 | 185 | 225,386 | 229,350 | In good condition. |
| 1 | W. W. Reynolds | 80 | May | 05 100.00 | 195 | 235 | 39,210 | 70,260 | Dry - in good condition. |
| 1 | A. J. Stanton | 5 | Jun | 05 100.00 | 220 | 180 | 221,360 | 150,000 | Wet and salty. |
| 1 | B. Williams | 260 | Mch | 05 200.00 | 210 | 240 | 178,004 | 156,830 | Dry - in good condition. |
| 2 | B. Williams | | Sep | 05 200.00 | 265 | 210 | 62,882 | 24,600 | Wet & Weak-In bad cond. |
| 1 | H. Bell | 110 | Apr | 05 200.00 | 210 | 175 | 76,310 | 75,000 | Wet & Salty - Siphoned. |
| 1 | C. Roberts | 132 | Aug | 08 50.00 | 170 | 150 | 156,830 | 70,260 | Wet & Salty-In bad cond. |
| 2 | C. Roberts | | Aug | 08 50.00 | 175 | 155 | 97,400 | 70,260 | Some oil & water-In fair con |
| 1 | S. L. Haas | 110 | Dec | 08 50.00 | 170 | 190 | 85,940 | 70,260 | Wet - in fair condition. |
| 2 | S. L. Haas | | Feb | 09 50.00 | 235 | 210 | 156,830 | 97,400 | Dry Salter-In fair cond. |
| 3 | S. L. Haas | | Mch | 09 50.00 | 155 | 210 | 85,940 | 70,260 | Wet and salty. |
| 4 | S. L. Haas | | May | 09 50.00 | 220 | 230 | 70,260 | 39,210 | Wet-In Fair Condition. |
| 5 | S. L. Haas | | Jun | 09 50.00 | 245 | 195 | 55,340 | 17,560 | Wet and very weak |
| 1 | D. Irwin | 33 | Aug | 09 150.00 | 265 | 165 | 221,360 | 85,940 | Dry - In good condition. |
| 2 | D. Irwin | | Dec | 09 150.00 | 275 | 170 | 335,862 | 70,260 | Very weak-In bad cond. |
| 1 | J. & S. Haas | 100 | Oct | 09 150.00 | 250 | 165 | 97,400 | 30,270 | Wet and salty - weak. |
| 2 | J. & S. Haas | | Dec | 09 100.00 | 185 | 160 | 85,940 | 57,854 | Wet & salty-In bad cond. |
| 1 | A. J. Wilson | 566 | Feb | 10 100.00 | 380 | 325 | 39,210 | 117,447 | Very wet. |
| 2 | A. J. Wilson (Oil) | | Jan | 11 200.00 | 400 | 300 | 156,830 | 150,000 | Oil well |
| 3 | A. J. Wilson | | Mch | 12 200.00 | | 450 | | 457,665 | In good condition. |

EXHIBIT O-4 SHEET 4
GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

## WELL RECORD REPORT

NORTH FIELD — WASHINGTON TWP. CONT. — OCTOBER 1912.

| WELL NO | NAME | ACRES | WHEN DRILLED | WELL RENT | PRESSURES SEPT 1911 | PRESSURES OCT 1912 | CAPACITIES SEPT 1911 OPEN | CAPACITIES OCT.1912 FLOW | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | E. Van Wey | 100 | Oct'10 | 100.00 | 375 | 400 | 209,664 | 246,500 | Wet-In fair cond.Siphoned |
| 2 | E. Van Wey | | Feb 11 | 200.00 | 370 | 300 | 256,552 | 70,260 | Wet-In fair condition. |
| 1 | S. E. Stickle | 80 | Aug 11 | 100.00 | 435 | 490 | 414,000 | 85,940 | Siphoned-In fair cond. |
| 1 | O. Hickey | 122 | Oct 11 | 200.00 | | 210 | | 305,242 | Siphoned-Wet-Salty-In fair. |
| 1 | H. C. Dicus | 130 | Mch 12 | 200.00 | | 520 | | 356,516 | In Good Condition. |
| | | | TOTAL WASHINGTON TWP. | | | | 3,716,500 | 3,223,154 | |

LIBERTY TWP - LICKING CO.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2 | P. J. Brooks | 175 | May 05 | 50.00 | 210 | 200 | 170,946 | 70,260 | Siphoned-Wet. In fair cond. |
| 2 | C. Slife | 191 | Jan 07 | 100.00 | 290 | 305 | 156,830 | 121,080 | " " " " " |
| 1 | M. A. Barber | 90 | May 07 | 100.00 | 285 | 295 | 139,800 | 97,400 | " Dry " " " |
| 1 | Maggie Hawkins | 124 | Oct 09 | 100.00 | 335 | 325 | 670,000 | 443,068 | Dry-Salter |
| 2 | Maggie Hawkins | | Dec 09 | 100.00 | 425 | 370 | 156,830 | 192,000 | Siphoned-In fair condition. |
| 3 | Maggie Hawkins | | Jun 10 | 100.00 | 445 | 425 | 477,820 | 315,000 | " " " " |
| 4 | Maggie Hawkins | | Apr 10 | 100.00 | 380 | 455 | 820,000 | 717,000 | " Dry-In good cond. |
| 5 | Maggie Hawkins | 65 | Jun 10 | 100.00 | 575 | 490 | 717,000 | 800,972 | Dry - Salter |
| 2 | J. Rhodeback | 153 | Apr 10 | 200.00 | 440 | 505 | 163,888 | 197,968 | Wet - In fair condition. |
| 1 | C. C. Barrick | 52 | Sep 12 | 200.00 | | 530 | | 750,000 | In good condition. |
| 1 | S. Snare | 15 | Oct 12 | 50.00 | | 415 | | 170,000 | In good condition. |
| | | | TOTAL LIBERTY TWP. | | | | 3,515,852 | 3,874,748 | |

EXHIBIT O-4 SHEET 5

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

# WELL RECORD REPORT

NORTH FIELD — EDEN TWP - LICKING CO. — OCTOBER 1912.

| WELL NO | NAME | ACRES | WHEN DRILLED | WELL RENT | PRESSURES SEPT 1911 | PRESSURES OCT 1912 | CAPACITIES SEPT 1911 OPEN | CAPACITIES OCT.1912 FLOW | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | J. Thompson | 53 | Jun 10 | 50.00 | 180 | 105 | 200,000 | 85,940 | Wet - In fair condition |
| 1 | A. & E. Mills | 69 | Jul 10 | 200.00 | 215 | 165 | 328,460 | 55,340 | Dry-Salter-In fair cond. |
| 2 | A. & E. Mills | | Aug 10 | 150.00 | 260 | 200 | 271,630 | 131,260 | In good condition. |
| 1 | H. Penick | 3 | Jul 10 | 100.00 | 255 | 170 | 271,630 | 70,260 | Wet. In fair condition. |
| 1 | W. Neibarger | 30 | Aug 10 | 100.00 | 305 | 190 | 73,160 | 56,597 | Wet. - In fair cond. |
| 1 | J. Moats | 90 | Aug 10 | 100.00 | 380 | 340 | 97,400 | 70,260 | Some oil and salt water |
| 1 | J. Burkholder | 120 | Sep 10 | 100.00 | 240 | 170 | 67,854 | 85,940 | Wet. In bad condition. |
| 1 | M. Van Ostrand | 106 | Sep 10 | 100.00 | 320 | 285 | 209,664 | 97,400 | Wet. In fair cond. |
| 2 | M. Van Ostrand | | Feb 11 | 100.00 | 315 | 220 | 192,120 | 70,260 | " " " " |
| 1 | O. Tavener | 110 | Jun 11 | 200.00 | 700 | 520 | 1,730,628 | 578,244 | Siphoned. In fair cond. |
| 1 | E. Swick | 210 | Jul 11 | 200.00 | 705 | 465 | 982,344 | 197,968 | Wet and salty. |
| 2 | E. Swick | | Jul.12 | 100.00 | | 500 | | 150,000 | In good cond. |
| 1 | O. Wheeler (Nethers) | 184 | Jul 11 | 200.00 | 700 | 390 | 910,000 | 139,800 | Siphoned. In fair cond. |
| 1 | E. Stillwell | 119 | Sep 11 | 200.00 | 700 | 370 | 156,000 | 121,080 | " " " " |
| 2 | E. Stillwell | | Feb 12 | 200.00 | | 575 | | 1,106,285 | In good condition |
| 1 | M. Myers | 156 | Sep 11 | 200.00 | 630 | 270 | 3,888,000 | 578,244 | Wet. In fair condition. |
| 1 | H. B. Oldaker | 83 | Sep 11 | 200.00 | 650 | 380 | 2,358,000 | 313,660 | Siph. In fair Cond. Oil |
| 2 | H. B. Oldaker | | Nov 11 | 200.00 | | 420 | | 97,400 | Oil & water-In fair cond. |
| 1 | W. H. Jones | 52 | Sep 11 | 200.00 | 700 | 265 | 750,000 | 85,940 | Wet-In fair cond.Siphoned |
| 1 | M. Huston | 40 | Nov 11 | 200.00 | | 390 | | 49,556 | Wet & Salty. In bad cond. |
| 1 | O. E. Oliver | 79 | Jul 12 | 200.00 | | 685 | | 1,000,000 | In good cond. |
| 2 | O. E. Oliver | | Sep 12 | 200.00 | | 695 | | 500,000 | In good condition |
| 1 | F. Oatman | 200 | Sep 12 | 200.00 | | 625 | | 800,000 | In good condition |
| 2 | F. Oatman | | Sep 12 | 200.00 | | 650 | | 1,800,000 | In good condition |
| | | | TOTAL EDEN TWP. | | | | 12,476,890 | 8,241,434 | |

# EXHIBIT O-4 SHEET 6

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT., 1912

## WELL RECORD REPORT

OCTOBER 1912

NORTH FIELD

MARY ANN TWP. - LICKING CO.

| WELL NO. | NAME | ACRES | WHEN WELL DRILLED | REST | PRESSURES SEPT 1911 | OCT 1912 | CAPACITIES SEPT 1911 O.F.M. | OCT.1912 F.C.F. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | J. C. Smith | 140 | Oct '12 | 200.00 | | 940 | | 171,000 | In good condition. |
| | | | NEWTON TWP. - LICKING CO. | | | | | | |
| 1 | P. Coffman | 188 | Oct '12 | 200.00 | | 800 | | 1,300,000 | In good condition (Lime Well) |
| | | | CLAY TWP. - KNOX CO. | | | | | | |
| 1 | I. Miller | 76 | Oct '10 | 100.00 | 225 | 170 | 139,800 | 49,656 | Wet - In fair condition. |
| | | | TOTAL NORTH FIELD | | | | 53,129,262 | 28,101,972 | |

## EXHIBIT O-4 SHEET 7

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

SUMMARY

| | SEPT 1911 OPEN FLOW | OCT. 1912 OPEN FLOW |
|---|---|---|
| Total North Field | 33,129,252 | 28,101,972 |
| Wells North Field | 132 | 132 |
| Average Production | 251,000 | 212,900 |
| Total South Field | 12,674,739 | 24,696,000 |
| Wells South Field | 51 | 54 |
| Average Production | 250,000 | 457,300 |
| Grand Total Both Fields | 45,803,991 | 52,797,972 |
| Wells, Both Fields | 183 | 186 |
| Average Production | 250,000 | 283,800 |

# EXHIBIT O-4 SHEET 8

## GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY OCT. 1912

ANALYSIS OF WELL REPORT --- OCTOBER 1912

| LOCATION TWP. & FIELD | WELLS PRODUC-ING LAST REPORT | WELLS PRODUC-ING LAST REPORT NOT REPORTED THIS REPORT | WELLS PRODUC-ING LAST REPORT NOW PRO-DUCING | NEW WELLS NOW PRO-DUCING FIRST TIME REPORTED | WELLS NOW PRO-DUCING | PRODUC-TION THAT WAS ESTI-MATED | AVERAGE CAPACITY | OPEN FLOW TOTAL CAPACITY | MAXI-MUM ROCK PRESS-URE | MINI-MUM ROCK PRESS-URE | MEAN ROCK PRESS-URE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bennington | 7 | 4 | 3 | | 3 | | 54,900 | 164,762 | 140 | 80 | 115 |
| Burlington | 26 | 7 | 19 | | 19 | | 116,000 | 2,214,654 | 256 | 120 | 160 |
| McKean | 33 | 2 | 31 | 3 | 34 | | 202,000 | 6,867,506 | 570 | 150 | 274 |
| Grantville | 14 | 2 | 12 | | 12 | | 164,000 | 1,976,578 | 440 | 155 | 250 |
| Washington | 24 | 1 | 25 | 3 | 26 | | 124,000 | 3,223,154 | 520 | 150 | 246 |
| Liberty | 10 | 1 | 9 | 2 | 11 | | 352,000 | 3,874,748 | 530 | 200 | 392 |
| Eden | 16 | | 16 | 8 | 24 | | 345,000 | 8,241,434 | 696 | 106 | 336 |
| Mary Ann | | | | 1 | 1 | | 171,000 | 171,000 | 940 | 940 | 940 |
| Newton | | 1 | | 1 | 1 | | 1,300,000 | 1,300,000 | 800 | 800 | 800 |
| Morgan | 1 | | | | | | | | | | |
| Clay | 1 | | 1 | | 1 | | 49,556 | 49,556 | 170 | 170 | 170 |
| North Field | 152 | 18 | 114 | 18 | 132 | | 212,900 | 28,101,972 | 940 | 80 | 283 |
| Liberty | 7 | 5 | 2 | | 2 | | 226,000 | 112,500 | 225,000 | 130 | 60 | 96 |
| Pleasant | 11 | | 11 | | 11 | | 860,000 | 78,000 | 860,000 | 230 | 60 | 110 |
| Good Hope | 5 | | 5 | | 5 | | 640,000 | 128,000 | 640,000 | 80 | 50 | 66 |
| Laurel | 28 | 8 | 20 | 15 | 35 | 22,721,000 | 660,000 | 22,721,000 | 500 | 70 | 250 |
| Benton | | | | 1 | 1 | | 250,000 | 250,000 | 200 | 200 | 200 |
| South Field | 51 | 13 | 38 | 16 | 54 | 24,696,000 | 457,300 | 24,696,000 | 500 | 50 | 186 |
| TOTAL NORTH & SOUTH FIELDS | 183 | 31 | 152 | 34 | 186 | 24,696,000 | 283,800 | 52,797,972 | 940 | 50 | 254 |

# EXHIBIT O-4 SHEET 9

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY, OCT. 1912

## WELLS DRILLED SINCE SEPTEMBER 1911 - FIRST TIME REPORTED

### NORTH FIELD

| TOWNSHIP | No | NAME | DATE DRILLED | OPEN FLOW Initial | OPEN FLOW Oct. 1912 | ROCK PRESSURE Initial | ROCK PRESSURE Sep. 1912 |
|---|---|---|---|---|---|---|---|
| McKean | 1 | S. Hand | Dec.1911 | 85,000 | 34,950 | 500 | 400 |
| " | 2 | S.M Anderson | Feb.1912 | 1,500,000 | 405,560 | 550 | 500 |
| " | 1 | A Stinger | Oct.1912 | 900,000 | 900,000 | 570 | 570 |
| Liberty | 1 | C.C Barrick | Sep.1912 | 750,000 | 750,000 | 530 | 530 |
| " | 1 | S Snare | Oct.1912 | 170,000 | 170,000 | 415 | 415 |
| Washington | 1 | O Hickey | Oct.1911 | 4,250,000 | 305,252 | 600 | 210 |
| " | 3 | A J Wilson | Mch.1912 | 1,000,000 | 457,665 | 550 | 450 |
| " | 1 | H C Dicus | Mch.1912 | 750,000 | 355,516 | 600 | 520 |
| Eden | 1 | M Huston | Nov.1911 | 1,000,000 | 49,556 | 600 | 390 |
| " | 2 | G Wheeler | Nov.1911 | 1,000,000 | Dead | 390 | |
| " | 2 | H Oldaker | Nov.1911 | 250,000 | 97,400 | 685 | 420 |
| " | 2 | R Stillwell | Feb.1912 | 2,500,000 | 1,106,285 | 635 | 575 |
| " | 1 | O Cliver | Jul.1912 | 1,000,000 | 1,000,000 | 685 | 685 |
| " | 2 | " | Sep.1912 | 500,000 | 500,000 | 695 | 695 |
| " | 2 | E F Swick | Jul.1912 | 185,000 | 150,000 | 600 | 500 |
| " | 1 | F Oatman | Sep.1912 | 800,000 | 800,000 | 625 | 625 |
| " | 2 | F Oatman | Sep.1912 | 1,800,000 | 1,800,000 | 650 | 650 |
| Mary Ann | 1 | J C Smith | Oct.1912 | 171,000 | 171,000 | 940 | 940 |
| Newton | 1 | P Coffman | Oct.1912 | 1,300,000 | 1,300,000 | 800 | 800 |
| | TOTAL NORTH FIELD | | | 19,911,000 | 10,353,184 | | |

### SOUTH FIELD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Laurel | 2 | S Miller | Oct.1911 | 450,000 | 200,000 | 400 | 300 |
| " | 1 | J Woltz | Oct.1911 | 2,760,000 | 500,000 | 540 | 200 |
| " | 2 | J Woltz | Jun.1912 | 2,000,000 | 750,000 | 500 | 225 |
| " | 2 | I Quillen | Nov.1911 | 3,500,000 | 750,000 | 500 | 200 |
| " | 1 | B Rouse | Nov.1911 | 1,400,000 | 500,000 | 550 | 450 |
| " | 1 | A Bingham | Dec.1911 | 2,460,000 | 500,000 | 400 | 150 |
| " | 1 | J C Gordon | Dec.1911 | 1,500,000 | 500,000 | 450 | 180 |
| " | 1 | C Beavers | Feb.1912 | 9,180,000 | 1,500,000 | 500 | 200 |
| " | 1 | C Lunsford | Feb.1912 | 7,462,000 | 1,500,000 | 500 | 250 |
| " | 1 | D Unkle | Jun.1912 | 100,000 | 100,000 | 400 | 200 |
| " | 2 | D Unkle | Aug.1912 | 4,600,000 | 4,600,000 | 500 | 500 |
| " | 3 | D Unkle | Nov.1912 | 266,000 | 266,000 | 500 | 500 |
| " | 2 | L Huffines | Jul.1912 | 4,750,000 | 4,000,000 | 500 | 450 |
| " | 1 | I Fox | Jul.1912 | 200,000 | 200,000 | 500 | 300 |
| " | 1 | A Davidson | Oct:1912 | 3,600,000 | 3,500,000 | 500 | 500 |
| Benton | 1 | F Conkle | May.1912 | 1,000,000 | 250,000 | 450 | 200 |
| | TOTAL SOUTH FIELD | | | 45,228,000 | 19,016,000 | | |
| | TOTAL BOTH FIELDS | | | 65,139,000 | 29,369,184 | | |

# EXHIBIT O-4 SHEET 10

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY OCT. 1912

WELLS PULLED SINCE SEPT. 1911

NORTH FIELD.

| TOWNSHIP | NO | NAME | DATE DRILLED | OPEN FLOW SEPT. 1911 | ROCK PRESS. SEPT. 1911 | DATE PULLED |
|---|---|---|---|---|---|---|
| Newington | 1 | H. Dunbold | Jan '05 | 117,560 | 160 | Feb '11 |
| " | 2 | H. Dunbold | Apr '05 | 351,670 | 110 | Feb '12 |
| " | 3 | H. Dunbold | Jan '06 | 70,260 | 105 | Aug '12 |
| " | 1 | H. Larimore | Feb '05 | 21,480 | 100 | Aug '12 |
| Burlington | 1 | W. Beatty | | 78,410 | 100 | Sep '12 |
| " | 1 | W. Hixon | Sep. '05 | 315,660 | 140 | Jan '12 |
| " | 1 | W. Holtzfer | Aug. '04 | 39,210 | 160 | Mar '11 |
| " | 2 | Wm Williams | Sep. '09 | 97,400 | 170 | Jul '12 |
| " | 2 | H. Winkler | Sep. '09 | 110,880 | 240 | Jan '12 |
| " | 1 | C. M. Rose | Feb. '09 | 70,010 | 145 | Aug '12 |
| " | 1 | C. Stinson | | 148,320 | 170 | Aug '12 |
| McKean | 2 | D. Alexander | Apr. '10 | 39,210 | 245 | Sep '12 |
| " | 1 | M. Bale | Mar. '09 | 54,960 | 280 | Jul '12 |
| Greenville | 1 | J. Ransower | Jul. '07 | 110,880 | 175 | Dec '11 |
| " | 1 | J. Warner | Mar. '07 | 21,480 | 145 | Jul '12 |
| Washington | 3 | C. Roberts | Jul. '09 | 301,048 | 175 | Dec '11 |
| Liberty | 3 | P. J. Brooks | Mch. '06 | 42,738 | 180 | Aug '12 |
| Eden | 1 | C. Wheeler | Nov. '11 | | | |
| Morgan | 2 | H. Bell | Feb. '10 | 55,340 | 120 | Nov '11 |
| | 2 | TOTAL NORTH FIELD | | 1,923,506 | | |
| | | | | SOUTH FIELD | | |
| Liberty | 2 | H. H. Beaty | Sep.'09 | 110,880 | 70 | Mch '12 |
| " | 1 | S. L. Beder | Jun.'09 | E. 20,000 | 80 | Nov '11 |
| " | 1 | J. Paugh | Oct.'09 | 46,266 | 150 | Feb '12 |
| " | 1 | J. Sands | Mch.'10 | M. 20,000 | 76 | Oct '11 |
| " | 1 | Hare | Feb.'11 | 55,340 | 75 | Sep '12 |
| Laurel | 1 | W. M. Anderson | Jun.'04 | 97,400 | 110 | Jun '12 |
| " | 1 | T. D. Woods | Oct.'05 | 42,738 | 165 | Oct. '11 |
| " | 2 | T. D. Woods | Feb.'09 | 81,940 | 100 | Oct. '11 |
| " | 3 | T. D. Woods | May.'07 | 17,560 | 100 | Jun. '12 |
| " | 1 | I. Kline | Sep.'07 | 39,210 | 85 | May '12 |
| " | 3 | P. Sater | Jan.'11 | 170,946 | 100 | May '12 |
| " | 1 | S. Kuhn | Jun.'11 | 800,972 | 300 | Jun '12 |
| " | 1 | Hockman Hrs. | Sep.'04 | 185,062 | 90 | |
| | | TOTAL SOUTH FIELD | | 1,692,314 | | |
| | | TOTAL BOTH FIELDS | | 3,615,820 | | |

**EXHIBIT O-4** SHEET 11

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY. OCT. 1912

## WELL RECORD REPORT

OTHER COMPANIES

| WELL NO | NAME | PRESSURES SEPT 1911 R.P. | PRESSURES OCT. 1912 R.P. | CAPACITIES OPEN FLOW SEPT 1911 | CAPACITIES OPEN FLOW OCT. 1912 |
|---|---|---|---|---|---|
| 1 | J. S. Graham | 600 | 390 | 740,000 | 186,256 |
| 3 | J. S. Graham | 505 | 358 | 382,340 | 203,374 |
| 4 | J. S. Graham | 475 | 376 | 511,908 | 352,814 |
| 5 | J. S. Graham | 570 | 368 | 670,000 | 263,481 |
| 7 | J. S. Graham | | 500 | | 496,550 |
| 9 | J. S. Graham | | 418 | | 696,740 |
| 1 | Saxton | 550 | 340 | 1,205,000 | 393,393 |
| | TOTAL GRAHAM & PEARSAL | | | 3,509,248 | 2,592,608 |
| | BALTIMORE COMPANY | | | | |
| 1 | E. B. Wagner | 125 | 120 | 178,000 | 75,000 |
| 1 | Fred Wagner | 125 | 120 | 110,000 | 75,000 |
| 1 | C. N. Mazelin | 325 | 325 | 185,000 | 100,000 |
| 1 | Myers | 100 | 70 | 42,000 | 30,000 |
| | TOTAL BALTIMORE COMPANY | | | 637,764 | 280,000 |
| | RUSHVILLE COMPANY | | | | |
| 2 | W. Wykoff | 160 | 140 | 382,000 | 200,000 |
| 4 | W. Wykoff | | 500 | | 1,000,000 |
| | TOTAL RUSHVILLE COMPANY | | | 382,340 | 1,200,000 |
| | WEST RUSHVILLE COMPANY | | | | |
| 1 | J. Kennedy | 200 | 150 | 670,000 | 200,000 |
| 1 | A. Friesner | 260 | 200 | 185,000 | 150,000 |
| | TOTAL WEST RUSHVILLE COMPANY | | | 855,062 | 350,000 |
| | GRAND TOTAL - LOCAL COMPANIES | | | 5,699,110 | 4,422,608 |

# EXHIBIT O-5

GAS WELL DATA PERTAINING TO COLUMBUS GAS AND FUEL COMPANY

AVERAGE ANNUAL DEPRECIATION OF GAS WELLS IN LICKING AND KNOX COUNTIES

| | | |
|---|---|---|
| Bennington Twp. | 51 | % |
| Burlington " | 38.6 | " |
| McKean " | 25.6 | " |
| Granville " | 33.3 | " |
| Washington " | 54.4 | " |
| Liberty " | 31.8 | " |
| Eden " | 72.2 | " |
| Morgan(Knox)" | 71.4 | " |
| Clay " " | 46.6 | " |
| Milford " " | 70.3 | " Gen. Av. Dep. 49.52% |

Eliminating Morgan Twp. & Clay Twp. & Milford Twp. Knox Co. 43.84%

| | | |
|---|---|---|
| Wash. Twp. Utica Gas Co. | 71.4 | Av. Annual Dep. |
| Graham & Pearsall | 60.1 | " " " |

| | | |
|---|---|---|
| Sep. 1909 - | 128 | producing wells. |
| " 1910 - | 126 | " " |
| " 1911 - | 132 | " " |
| Oct. 1912 | 132 | " " |

| | |
|---|---|
| New Wells Drilled from Feb. 1-1909 to present time | 100 |
| Dry Holes included in above | 13 |
| Abandoned & Plugged in last 4 yrs. | 61 |
| Sold | 16 |
| Average Rock Pressure - 1912 | 283 |

EXHIBIT P

COMPARATIVE STATEMENT SHOWING COST OF PRODUCING GAS - PER 1000 CUBIC FEET
BY THE LOGAN NATURAL GAS AND FUEL COMPANY - FOR YEARS 1903 TO 1911 INCLUSIVE

| | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
|---|---|---|---|---|---|---|---|---|---|
| FIELD COST | | | | | | | | | |
| Repair of Lines, Wells, Labor Drilling New Wells, etc. | .0134 | .0182 | .0253 | .0209 | .0249 | .0180 | .0293 | .0368 | .0340 |
| Field Operating Expense, Lines, Wells, etc. | .0101 | .0166 | .0296 | .0378 | .0329 | .0378 | .0412 | .0518 | .0649 |
| Gen'l Field Exp., Taxes, etc. | .0072 | .0054 | .0056 | .0051 | .0089 | .0066 | .0054 | .0060 | .0072 |
| TOTAL FIELD COST | .0357 | .0402 | .0605 | .0638 | .0667 | .0624 | .0758 | .0946 | .1061 |
| FIXED CHARGES | | | | | | | | | |
| Depreciation on Field Only | .0173 | .0209 | .0272 | .0307 | .0267 | .0309 | .0336 | .0387 | .0403 |
| COST OF GAS IN FIELD | .0540 | .0611 | .0877 | .0943 | .0934 | .0933 | .1096 | .1333 | .1464 |
| PROFIT | | | | | | | | | |
| 6% Upon Field Investment | .0244 | .0279 | .0363 | .0409 | .0356 | .0412 | .0451 | .0515 | .0537 |
| TOTAL COST OF GAS IN FIELD | .0784 | .0890 | .1240 | .1352 | .1290 | .1345 | .1547 | .1849 | .2001 |

EXHIBIT Q

COMPARATIVE STATEMENT SHOWING THE AVERAGE PRICE PER 1000 CU. FEET OF GAS, RECEIVED BY THE LOGAN NATURAL GAS AND FUEL COMPANY, FROM OTHER COMPANIES, FOR YEARS 1903 TO 1911 INCLUSIVE.

| CONTRIBUTORS | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
|---|---|---|---|---|---|---|---|---|---|
| Bellevue Gas Company | .1652 | .1677 | .1617 | .1622 | .1725 | .1845 | .1914 | .1984 | .1932 |
| Dayton Gas Company | ---- | ---- | ---- | .1756 | .1685 | .1892 | .1915 | .1907 | .1872 |
| Delaware Gas Company | .1577 | .1561 | .1585 | .1580 | .1667 | .1808 | .1816 | .1834 | .1782 |
| Marion Gas Company | .1351 | .1375 | .1331 | .1320 | .1514 | .1651 | .1839 | .1805 | .1741 |
| Citizens Co. ( Elyria & Lorain ) | ---- | .1254 | .1309 | .1328 | .1435 | .1564 | .1811 | .1925 | .1673 |
| Sandusky Gas & Electric Company | ---- | .1471 | .1435 | .1383 | .1506 | .1651 | .1663 | .1728 | .1646 |
| Fremont Gas, Elec. Light & Pwr Co. | ---- | .1191 | .1173 | .1182 | .1279 | .1370 | .1670 | .1667 | .1608 |
| Buckeye Gas Co. ( Circleville ) | ---- | .1216 | .1296 | .1374 | .1475 | .1444 | .1468 | .1508 | .1548 |
| NEWARK NATURAL GAS & FUEL COMPANY | .0634 | .0962 | .0968 | .0967 | .1006 | .1040 | .1050 | .1116 | .1176 |
| Average received from all Gas Sold by The Logan Company | .1306 | .1384 | .1326 | .1438 | .1554 | .1661 | .1753 | .1830 | .1749 |

EXHIBIT R

STATEMENT SHOWING PROPORTION OF TOTAL GAS PRODUCED IN THOUSAND CUBIC FEET BY THE LOGAN NATURAL GAS AND FUEL COMPANY WHICH WAS SOLD TO THE NEWARK NATURAL GAS AND FUEL COMPANY

| | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 |
|---|---|---|---|---|---|---|---|---|---|
| Total Gas Produced | 9,016,321 | 8,642,100 | 7,259,015 | 7,690,086 | 9,846,661 | 9,236,669 | 8,933,084 | 8,202,391 | 8,259,283 |
| Gas Sold to Newark Co. | 1,886,326 | 1,479,562 | 1,477,564 | 1,591,875 | 1,640,565 | 1,434,857 | 1,456,130 | 1,477,392 | 1,505,928 |
| % to Newark Co. of Total | 21% | 17% | 20% | 20.7% | 16.7% | 15.4% | 16.3% | 18% | 18.2% |
| Average Consumed Daily Maximum Month | 8,323 | 6,466 | 6,966 | 8,990 | 7,433 | 7,133 | 6,700 | 7,600 | 7,133 |

COMPARISON OF AVERAGE YEARLY CONSUMPTION PER DOMESTIC CONSUMER FOR YEARS 1909 to 1911 INCLUSIVE

| | 1909 | | 1910 | | 1911 | |
|---|---|---|---|---|---|---|
| | RATE | M FEET | RATE | M FEET | RATE | M FEET |
| Lorain | .304 | 89 | .314 | 86 | .305 | 83 |
| Fremont | .301 | 84 | .307 | 89 | .30 | 97 |
| Elyria | .302 | 114 | .302 | 118 | .30 | 106 |
| Marion | .30 | 110 | .309 | 118 | .302 | 112 |
| Chillicothe | .252 | 119 | .258 | 126 | .256 | 116 |
| Circleville | .242 | 128 | .248 | 122 | .24 | 121 |
| Mansfield | .25 | 126 | .26 | 127 | .25 | 127 |
| Newark | .18 | 143 | .181 | 154 | .22 | 140 |

NEWARK NATURAL GAS AND FUEL COMPANY VS.

EXHIBIT S

STATEMENT SHOWING NET EARNINGS FROM GAS OPERATIONS - INTEREST EARNINGS - DIVIDENDS PAID AND AMOUNT PLACED TO CITY PLANT FOR BETTERMENTS
THE NEWARK NATURAL GAS AND FUEL COMPANY - FOR YEARS 1902 TO 1911 INCLUSIVE

| | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investment | | | | | | | | | | | |
| Main | 235,922.27 | 216,914.27 | 216,914.27 | 216,914.27 | 216,914.27 | 216,921.77 | 216,921.77 | 37,255.68 | 37,255.68 | 37,255.68 | |
| Field | 281,883.29 | 289,925.11 | 292,648.05 | -- | -- | -- | -- | -- | -- | -- | |
| Town | 183,187.96 | 214,547.65 | 227,672.44 | 242,419.55 | 253,268.58 | 251,713.62 | 255,519.34 | 259,456.93 | 263,282.70 | 265,633.34 | |
| Total | 700,993.52 | 721,387.03 | 737,234.76 | 459,333.82 | 470,182.85 | 468,635.39 | 472,441.11 | 296,712.61 | 300,538.38 | 302,889.02 | 4,930,348.49 |
| Gas Sold M Feet | 740,770 | 1,886,326 | 1,479,562 | 1,477,564 | 1,591,875 | 1,640,565 | 1,434,857 | 1,486,130 | 1,477,392 | 1,508,928 | |
| Amount Received for Gas Sold | 82,390.13 | 179,342.87 | 196,290.50 | 199,399.02 | 219,508.94 | 235,389.84 | 212,793.30 | 218,252.09 | 235,442.67 | 252,954.28 | |
| Paid for Gas Purchased | -- | 77,181.69 | 122,010.53 | 142,914.37 | 153,674.55 | 164,794.98 | 149,054.05 | 152,785.71 | 164,809.99 | 177,068.02 | |
| Net Received for Gas | 82,390.13 | 102,161.18 | 74,279.97 | 56,484.65 | 65,834.39 | 70,594.56 | 63,739.25 | 65,466.38 | 70,632.78 | 75,886.26 | |
| Misc. Earnings from Gas | -- | 233.35 | 761.75 | 7,093.25 | 5,095.20 | 11,963.85 | 5,675.65 | 72.80 | -- | -- | |
| Total Earnings from Gas | 82,390.13 | 102,394.53 | 75,041.72 | 63,577.90 | 70,929.19 | 82,558.41 | 67,414.90 | 65,593.58 | 70,632.78 | 75,886.26 | |
| Less Operating Expenses | 12,992.74 | 28,657.74 | 44.789.78 | 35,106.34 | 22,743.16 | 22,073.96 | 23,739.30 | 30,533.56 | 25,931.79 | 27,281.50 | |
| Net Earnings from Gas Operations | 69,397.39 | 63,736.79 | 30,251.94 | 28,471.66 | 48,186.03 | 60,484.45 | 43,675.60 | 35,060.02 | 44,700.99 | 48,604.76 | |
| Interest Earnings | 1,167.07 | 7,797.36 | 5,991.25 | 2,798.97 | 19,926.47 | 9,031.35 | 9,347.17 | 29,070.13 | 29,207.69 | -- | 104,337.46 |
| Dividends Paid | -- | -- | 180,000.00 | -- | -- | -- | -- | 204,000.00 | -- | 600,000.00 | 984,000.00 |
| Betterments for Year | -- | 31,359.69 | 13,124.79 | 14,747.11 | 10,849.03 | 1,554.96 | 2,805.72 | 3,937.59 | 3,825.77 | 2,350.64 | 82,445.38 |

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760 UNITED STATES OF AMERICA,
*Supreme Court of Ohio, ss:*

In obedience to the commands of the within writ, I herewith transmit to the Supreme Court of the United States, a duly certified transcript of the complete record and proceedings in the within entitled case, with all things concerning the same.

In witness whereof, I hereunto subscribe my name and affix the Seal of said Supreme Court of Ohio, in the City of Columbus, this 24th day of August, A. D. 1915.

[Seal the Supreme Court of the State of Ohio.]

FRANK E. McKEAN,
*Clerk of the Supreme Court of Ohio.*

761 The Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY, Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, Solicitor, Defendant in Error.

*Petition for Writ of Error from the Supreme Court of the United States to the Supreme Court of the State of Ohio.*

To the Honorable Hugh L. Nichols, Chief Justice of the Supreme Court of the State of Ohio:

Considering itself aggrieved by the final decision of the Supreme Court in rendering judgment against it in the above entitled case, the plaintiff in error hereby prays a writ of error from the said decision and judgment to the United States Supreme Court and an order fixing the amount of a supersedeas bond.

The plaintiff in error alleges that in this cause, on the 2d day of July, A. D. 1915, final judgment was rendered against your petitioner by the Supreme Court of the State of Ohio, that being the highest court of law or equity in said state, wherein it was adjudged that the Common Pleas Court of Licking County, Ohio, did not err at the trial of this cause, in holding that the provisions of a certain ordinance passed by the City of Newark on the 6th day of March, 1911, by its duly constituted legislative body, fixing a rate for natural gas to be charged by said plaintiff in error, was not in conflict with the Constitution of the United States, or with the provisions of the first section of the 14th Amendment of said Constitution, or with the provisions of the 5th Amendment of said Constitution, and wherein it was also held by the said Supreme
762 Court of the State of Ohio, that the Court of Appeals of Licking County, Ohio, did not err in affirming said judgment of said Court of Common Pleas; and wherein it was by said Supreme

Court of the State of Ohio, further adjudged that said act of said city council is a valid law and is reasonable, and not in violation of, or repugnant to the Constitution of the United States, or either of the Amendments hereinbefore cited.

In each and all of which rulings and judgments, said Supreme Court of the State of Ohio erred to the prejudice of the plaintiff in error, all of which appears in the record and final judgment of said Supreme Court of the State of Ohio affirming the judgment of the Court of Appeals of Licking County, Ohio, and the Court of Common Pleas of Licking County, Ohio.

Wherefore your petitioner prays for an allowance of a writ of error from the Supreme Court of the United States, to the Supreme Court of the State of Ohio, and the Judges thereof, to the end that the record in this case may be removed into the Supreme Court of the United States, and the errors complained of by your petitioner may be examined and corrected, and said judgment reversed, and said cause remanded to said Court of Appeals for further consideration.

THE NEWARK NATURAL GAS & FUEL COMPANY,
By EUGENE MACKEY,
S. M. DOUGLASS,
JAMES R. FITZGIBBON,
CHARLES MONTGOMERY,
*Its Attorneys.*

STATE OF OHIO SUPREME COURT, *ss:*

Let the writ of error issue upon the execution of a bond by the Newark Natural Gas and Fuel Company to the City of Newark, Ohio, in the sum of Three Thousand dollars; such bond when approved to act as a supersedeas.

Dated August 7, 1915.

HUGH L. NICHOLS,
*Chief Justice Supreme Court of Ohio.*

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

763 [Endorsed:] No. 14787. The Supreme Court of Ohio. The Newark Natural Gas and Fuel Company, Plaintiff in Error, vs. The City of Newark, by Frank A. Bolton, Solicitor, Defendant in Error. Petition for Writ of Error from the Supreme Court of the U. S. to the Supreme Court of the State of Ohio. Eugene Mackey, S. M. Douglass, James R. Fitzgibbon, and Charles Montgomery, Att'ys for Plaintiff in Error. Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

764 In the Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, City Solicitor.

*Assignments of Errors on Writ of Error from the Supreme Court of the United States to the Supreme Court of Ohio.*

Now comes the plaintiff in error herein, and respectfully submits that in the record, proceedings, decision and final judgment of the Supreme Court of Ohio, in the above entitled matter, there is manifest error in this, to-wit:

First. The Supreme Court of Ohio erred in holding that the provisions of a certain ordinance passed by the City of Newark, Ohio, on the 6th day of March, 1911, by its duly constituted legislative body fixing a rate for natural gas to be charged by said plaintiff in error, as shown by the record, is not in conflict with the Constitution of the United States, or in violation with the provisions of the first section of the 14th Amendment to said Constitution, or with the 5th Amendment of the Constitution of the United States.

Second. The court erred in holding that said act did not violate the provisions of article 1, section 10 of Clause 1, of the Constitution of the United States.

Third. The court erred in holding that by the provisions of said ordinance and act, the Newark Natural Gas and Fuel Company is not deprived of rights, privileges and immunities secured by other citizens of the United States, and of the State of Ohio.

Fourth. The court erred in holding that by the provisions of said act and ordinance the said The Newark Natural Gas and Fuel Company is not deprived of its property without due process of law.

Fifth. The court erred in holding that by the provisions of said act, the property of the Newark Natural Gas and Fuel Company was not taken without just compensation.

765 Sixth. The court erred in holding that the provisions of said act are in conflict with, and in violation of section 1, article 14, of the Amendment to the Constitution of the United States.

Seventh. The court erred in affirming the judgment of the Court of Appeals of Licking County, Ohio.

EUGENE MACKEY.
S. M. DOUGLASS.
JAMES R. FITZGIBBON.
CHARLES MONTGOMERY.

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

766 In the Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS & FUEL CO., Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, City Solicitor, Defendant in Error.

*Writ of Error from the Supreme Court of the United States to the Supreme Court of the State of Ohio.*

IN THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the Honorable Judges of the Supreme Court of the State of Ohio, Greeting:

Because in the record and proceedings, as always in the rendition of the judgment of the people, which is in the said Supreme Court of the State of Ohio, by you, or some of you, being the highest court of law or equity of said state in which a decision could be had in a suit between the Newark Natural Gas and Fuel Company, and the City of Newark, Ohio, By Frank A. Bolton, Solicitor, wherein was drawn the question of the validity of a certain ordinance passed by the City of Newark, Ohio, by its duly constituted legislative body, on the ground of its being repugnant to the provisions of the Constitution of the United States and the Amendments thereto, and said decision was in favor of the validity of said ordinance or act, and manifest error has happened to great damage of said The Newark Natural Gas and Fuel Company, plaintiff in error, we being willing that error, if any has been, should be duly corrected, and full and adequate justice done to the party aforesaid, and in its behalf, do command you that judgment be herein given that under your seal, distinctly and openly, to sign the record and proceedings aforesaid, of all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington City on the 11" day of September, 1915, in the said Supreme Court of the United States, to be then and there held

767 that, the record and proceedings aforesaid being inspected, the said Supreme Court of the United States may cause further to be done therein to correct that error which, of a writ and according to the laws and customs of the United States, should be done.

Witness, the Honorable Edward Douglass White, Chief Justice of the Supreme Court of the United States, this 12th day of August, A. D. 1915.

[Seal United States District Court, South. Dis., Ohio.]

B. E. DILLEY,
*Clerk of the U. S. District Court, Southern District of Ohio, Eastern Division.*

Allowed by:
HUGH L. NICHOLS,
*Chief Justice of the Supreme Court of Ohio.*

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

768 EXHIBIT.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY, Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, City Solicitor, Defendant in Error.

*Bond.*

Know all men by these presents, that we, The Newark Natural Gas and Fuel Company, as principal, and P. W. Lupher and S. M. Douglass, as sureties, are held and firmly bound unto the City of Newark, Ohio, in the sum of $3,000.00 to be paid the said City, to which payment well and truly to be made we bind ourselves jointly and severally by these presents.

Sealed with our seals, and dated the 7th day of August, 1915.

Whereas, the above named plaintiff in error seeks to prosecute its writ of error to the United States Supreme Court, to reverse the judgment rendered in the above entitled action by the Supreme Court of the State of Ohio,

Now, therefore, the condition of this obligation is such that if the above named plaintiff in error shall prosecute its said writ of error to effect, and answer all costs and damages that may be adjudged if it shall fail to make good its plea, then this obligation to be void; otherwise, to remain in full force and effect.

[SEAL.] THE NEWARK NATURAL GAS & FUEL COMPANY,
By P. W. LUPHER,
*Its Vice-President & Gen'l Manager.*
P. W. LUPHER,
S. M. DOUGLASS.

Attest:

____ ____,
*Secretary.*

769 STATE OF OHIO,
*Franklin County, ss:*

P. W. Lupher and S. M. Douglass, being each duly sworn on oath depose and say,

We are each of lawful age, and are citizens of the State of Ohio, and know the conditions of the foregoing instrument to which we have attached our names, and each for himself say we are worth the sum of $10,000.00, over and above all debts, liabilities and exemptions.

P. W. LUPHER.
S. M. DOUGLASS.

Subscribed and sworn to before me this 7th day of August, 1915.

PETER A. ALBERTY,
*Notary Public, Franklin County, Ohio.*

My commission expires on the 11th day of January, 1918.

Bond approved, and to operate as a supersedeas.
Dated the 7th day of August, 1915.

HUGH L. NICHOLS,
*Chief Justice, Supreme Court of Ohio.*

770 EXHIBIT.

*Citation.*

THE UNITED STATES OF AMERICA, *ss:*

The President of the United States to the City of Newark, Ohio, Greeting:

You are hereby cited and admonished to be and appear at and before the Supreme Court of the United States at Washington, D. C., within thirty days from the date hereof, pursuant to a writ of error filed in the office of the Clerk of the Supreme Court of the State of Ohio, wherein The Newark Natural Gas and Fuel Company is plaintiff in error, and you are defendant in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error as in said writ of error mentioned, should not be corrected, and why speedy justice should not be done the parties in that behalf.

Witness, the Chief Justice of the Supreme Court of the State of Ohio this 12" day of August, 1915.

HUGH L. NICHOLS,
*Chief Justice, Supreme Court of Ohio.*

Attest:

[Seal The Supreme Court of the State of Ohio.]

FRANK E. McKEAN,
*Clerk Supreme Court of Ohio.*

NEWARK, OHIO, 16" day of August, 1915.

Resigning any and all rights as to regularity and form of these proceedings,

We, attorneys of record for the defendant in error in the above entitled case, hereby acknowledge due service of the above citation, and enter an appearance in the Supreme Court of the United States.

RALPH NORPELL,
FRANK A. BOLTON,
EDWARD KIBLER,
*Att'ys for the City of Newark, Ohio.*

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

771 The Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY, Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, Solicitor, Defendant in Error.

*Præcipe.*

To Frank E. McKean, Clerk of the Supreme Court of the State of Ohio:

In the above styled case, a writ of error having been directed to you from the Supreme Court of the United States to the Supreme Court of the State of Ohio, please make return of same, by transmitting a true copy of the record, all assignments of errors, together with docket and journal entries, and all of the proceedings in the case, to the Supreme Court of the United States.

In view of the character of the case, and questions to be reviewed, it is not deemed advisable or proper to eliminate any part of the record or papers, but to transmit a complete and true copy of said record and papers in the case.

S. M. DOUGLASS,
*Attorney for Plaintiff in Error.*

[Endorsed:] #14787. Præcipe. Filed Aug. 23, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

772 *Newark Rate Case—Opinion of Supreme Court.*

773 THE NEWARK NATURAL GAS AND FUEL COMPANY
v.
THE CITY OF NEWARK, OHIO, by FRANK A. BOLTON, Solicitor.

1. A transcript of verbatim stenographic notes of testimony in the common pleas court may be adopted and used in the court of appeals by agreement of counsel, and if by proper attachment and reference made a part of the bill of exceptions, will not be stricken from the record, but will be considered by this court.

2. Before a gas company may be relieved from compliance with the terms of an ordinance fixing the maximum price for gas, which has been regularly passed in pursuance of the authority conferred by section 3982, General Code, it must show that the rates so fixed are plainly unreasonable and will result in the taking of its property without just compensation.

3. In determining whether the price fixed by such ordinance will yield just compensation, it should be ascertained whether the amount of net profits from operation at the prescribed rate will

produce a reasonable return upon the value of the plant of the company at the time of the inquiry.

4. The value of such property resting largely upon opinion evidence, the fact that the company prior to the passage of the ordinance in question had voluntarily reduced its rate to that thereafter fixed by such ordinance, and continued the same for
774 several years, may be controlling and justify the conclusion that such rate is remunerative.

5. Where the company affected by such ordinance is a distributing company only, and procures the gas furnished under its franchise from a producing company upon a percentage basis of meter readings, and its contract therefor does not expire until two years subsequent to the passage of the ordinance fixing the maximum price to be charged for gas, the effect of such ordinance should be ascertained from conditions then existing, and in the absence of evidence to the contrary, the court may properly assume that the price to the distributing company remains the same, and refuse to anticipate a condition that may obtain in the future, or speculate as to the future production of natural gas, or the cost thereof to the producing company.

6. Where it is not clearly shown that a fixed rate for gas will be confiscatory, the company should be required to abide the test of actual experience under such rate, and when certainty rather than prophesy may be obtained, present its case upon actual facts and conditions as they may then be shown to exist.

(No. 14787—Decided July 2, 1915.)

Error to the Court of Appeals of Licking County.

775 This proceeding originated in the court of common pleas of Licking county where, on April 25th, 1911, a petition was filed by the city of Newark, through its solicitor, and a mandatory injunction sought against the Newark Natural Gas and Fuel Company to compel it to comply with the provisions of an ordinance of the city passed March 6th, 1911, which ordinance fixed the maximum price the defendant company could charge the consumers of natural gas in said city for a period of five years at twenty cents per one thousand cubic feet of natural gas for fuel and light with ten per cent discount on all bills paid before the tenth of the succeeding month. Said company had refused to accept the provisions of said ordinance or abide by the terms it specified, and had notified its consumers in said city that it would not accept the price so fixed and that unless the price of twenty-five cents was paid, service would be discontinued.

Said company furnishes natural gas for fuel and light to the inhabitants of said city of Newark under favor of a franchise granted by said city, through its council, February 21st, 1898, and ever since the passage and acceptance of said ordinance said company has continued to supply gas to said city and its inhabitants.

By its answer said company admits the passage of said ordinance

of March 6th, 1911 in due form, but avers that it is unreasonable in its terms, and deprives said company of adequate profit,
776 and operates as a fraud upon the property rights of said company; that it is contrary to and in violation of section 1, Article I of the Bill of Rights of the Constitution of Ohio, also of section 19, Article I of the Constitution of the state, for the reason that it is the taking of private property without due process of law, in that said ordinance attempts to compel said company to furnish gas at a price without just compensation of profit. It charges further that said ordinance is contrary to and in violation of section 1 of the Fourteenth Amendment of the Constitution of the United States, in that it denies to said company the equal protection of the law by compelling it to furnish gas for a period, and at a price, without adequate return, compensation or profit.

In the court of common pleas a judgment and decree was entered in favor of the city, and on appeal, the court of appeals entered the same decree as did the court below, and from this judgment and decree error is now prosecuted in this court.

Mr. Eugene Mackey, Mr. S. M. Douglass and Messrs. Fitzgibbon, Montgomery & Black, for plaintiff in error.

Mr. Ralph Norpell, Solicitor, for defendant in error.

777 MATTHIAS, *J.*:

The defendant in error seeks to have stricken from the printed record all of the so-called "exhibit AA," excepting exhibits thereto attached upon the claim that the same is not a part of the bill of exceptions taken in the court of appeals and filed in this court. The matter which defendant in error contends is not properly a part of the record, and, therefore, should not be considered by the court, embraces all the evidence offered by the plaintiff in error in the hearing of this case in the court of common pleas. The record shows that defendant in error introduced and read in evidence all the evidence given in its behalf on the trial in the court of common pleas, and that the plaintiff in error then offered and read in evidence all the evidence offered by it in the trial in the court of common pleas, and then follows the statement: "A full and complete transcript of verbatim stenographic notes of said testimony and evidence given on the trial in the court of common pleas is hereto attached, marked "AA" and made a part hereof." In this manner all the evidence given in the lower court is brought into the record in the court of appeals, and by attachement and reference, as above indicated, was made a part of the bill of exceptions by the judges of that court. The record before us shows that counsel for plaintiff in error sought, and was allowed by the court of appeals, to reserve exceptions to the exclusion of certain evidence sought to be introduced in the
778 court of common pleas. It thus appears that probably for the purpose of convenience and economy of time the evidence was placed before the court of appeals in such manner. No objection to this practice is disclosed by the record, and we conclude that only in the instance above stated was exceptions noted in

the court of appeals to the ruling of the court upon the introduction of evidence, and that otherwise the record, as made in the common pleas court, was submitted to and received by the court of appeals in lieu of again calling the witnesses. Under such circumstances this court will consider the evidence thus brought into the record, although in accordance with the decision of Dunn v. State, 23 Ohio St., 167, statements in such exhibit purporting to recite rulings of the trial court admitting or excluding evidence, cannot be considered.

The ordinance of the city of Newark, the validity of which is questioned, was passed by virtue of the power conferred by section 3982 of the General Code, which authorizes the council of a municipality, "to regulate from time to time the price which such companies may charge, * * * for gas for lighting or heating purposes;" and further provides that such companies shall in no event charge more than the price specified by the ordinance of council. It is admitted that said ordinance was passed in due form by the council of the city of Newark, and the only issue presented arises from the contention of the plaintiff in error that the rate prescribed by such ordinance is unreasonable and if enforced
779 will result in confiscation of its property.

The Newark Natural Gas and Fuel Company was organized in 1889 and in 1898 was granted a twenty-five year franchise by said city. For several years it was both a producing and distributing company, but for the past ten or twelve years it has been a distributing company only, and since 1904 has procured its supply of gas from the Logan Natural Gas and Fuel Company on a percentage basis under a contract between said companies which expired March 1st, 1913. Although the previous ordinance permitted a net rate of twenty-five cents, the eighteen cent rate was voluntarily adopted by the plaintiff in error sometime prior to the adoption of the ordinance now in question. Plaintiff in error now contends that such reduction was made because of the development of a near-by field, greatly augmenting the supply of gas, and that it is now materially reduced.

It is argued by the plaintiff in error that this case differs greatly from many of the adjudicated cases of this character, by reason of the fact that two companies are necessarily affected by the rate, the producing company and the distributing company, and that in the determination of the fairness and reasonableness of the prescribed rate it becomes necessary to consider, not only the cost of procuring and distributing gas, but also the cost of its production.

However, the facts and the conditions which may properly
780 be considered, as well as the test to be applied thereto by the courts for the purpose of determining every question in controversy in this action, are well settled and have been clearly and concisely announced in what must be regarded as leading cases of the class to which this proceeding belongs. We direct particular attention to the decision of the Supreme Court of the United States in the case of the City of Knoxville v. Knoxville Water Company, 212 U. S., 1 and Willcox v. Consolidated Gas Co., 212 U. S., 19.

In the former case it is held that, "Rate making is a legislative function, whether exercised by the legislature or by a subordinate body to which power has been delegated, such as a municipality. While courts may refuse to enforce legislation on constitutional ground, the power should only be exercised in the clearest cases."

This action of the city having been taken pursuant to legislative authority, is a proper exercise of legislative power, and, therefore, the company assailing the rates fixed in such manner must show that their enforcement will result in the taking of its property without just compensation. Cedar Rapids Co. v. Cedar Rapids, 118 Iowa, 234, 120 N. W., 966.

In Willcox v. Consolidated Gas Co., Supra, the rule to be applied in cases of this character for the purpose of ascertaining whether a prescribed rate is unreasonable, is concisely stated. It is there held that, "Rates when fixed by legislative authority, for public service corporations, should allow a fair return upon the reason-
781 able value of the property at the time it is being used, but the legislative act will not be declared invalid by the courts unless the rates are so unreasonably low that their enforcement would amount to taking property for public use without compensation."

Upon the hearing in the court of appeals a very large volume of evidence was introduced tending to show the value of the plant of the Newark Gas Company and the net profits that would be realized under existing conditions at the price fixed. From these factors it was ascertained that the net profits were sufficient to provide the company a fair and just return upon the value of its property. It would not be profitable here to review in detail the large volume of data presented or discuss the various opinions of the several experts who testified upon the trial of the case. Our only duty is to ascertain whether the conclusion reached by the court of appeals is the correct one. From the record before us it is apparent that if computation be based upon the highest valuation of the complaining company's plant fixed by any witness, a net profit of ten per cent would be realized by the company. On the valuation of another witness called by plaintiff in error the rate now complained of yielded in 1911 a net profit of approximately seventeen per cent. In some of these estimates elements were included which should not enter into the calculation. For instance one expert upon whose evidence plaintiff in error placed great reliance, and apparently a man of skill and experience in his profession, based his estimate of
782 the value of said plant on the cost of building a competing plant on the same streets and included an item of $33,379 for "pavement over mains," notwithstanding the record shows that there was no street paving over the mains when the pipes were originally laid. We refer to this instance as illustrative merely and to show the care that must be exercised in following the estimates of the valuation of property of such character.

When property is devoted to a use in which the public has an interest the public is thereby granted an interest in such business and it is subject to control for the common good. Such company is entitled, therefore, only to a fair return on the value of that

which is employed for the public convenience. Munn v. Illinois, 94 U. S., 113; San Diego Land & Town Co. v. National City, 174 U. S., 739; and it should be based upon the reasonable value of the property at the time it is being used by the public. Willcox v. Consolidated Gas Co., supra.

In the calculations above referred to no deduction was made for depreciation of the plant and the evidence shows that five per cent a year would be a fair estimate for that item. When the value of property of such character rests so largely upon opinion evidence, the fact that the company prior to the passage of the ordinance in question had voluntarily reduced its rate to that specified in
783 the ordinance thereafter passed, and maintained the same for several years immediately preceding the passage of such ordinance, may be controlling and fully justify the conclusion that such rate is remunerative.

It may be fairly assumed that rates voluntarily made by the company return not only a fair but adequate compensation, especially in the absence of evidence showing any actual increase of expense or cost of furnishing gas to the Newark patrons. No evidence was offered showing what the Newark Company pays the Logan Company for gas subsequent to March 1st, 1913, although the opportunity was afforded the Newark Company to produce such evidence as late as September 26, 1914. The court should not be asked to indulge in mere speculation and arrive at a conclusion based only upon various and varying opinions of experts, which opinions are apparently based upon conditions which are themselves admittedly varying and uncertain. The records of the company showing its net earnings subsequent to 1911 should have been disclosed and all information available placed before the court that would tend to show that the rate fixed is unreasonable. Sufficient time had elapsed to enable the company to place before the court actual facts showing the effect of operation on its plant and the furnishing of gas upon the terms prescribed by this ordinance. The burden is upon the company to show the court that the price fixed is unreasonable, not merely that there is a possibility or probability that it will become so. If there was a change in the price required by the producing company, such evidence should
784 be in the record. Evidence of conditions, not only when the ordinance was passed, but subsequent thereto, was admissible and would have been most helpful to the court in solving the problem presented in a controversy of this character. City of Knoxville v. Knoxville Water Co., supra.

We find in the record no possible basis for the claim that the rate fixed by this ordinance does not yield a fair and just compensation to the plaintiff in error under the conditions obtaining in 1911. The following cases deal instructively with the question of what is adequate compensation; Lincoln Gas & E. L. Co. v. Lincoln, 182 Fed. 926; Willcox v. Consolidated Gas Co., supra, and Cedar Rapids Gas & Light Co. v. Cedar Rapids, supra.

However, it is urged by plaintiff in error that in view of the fact that it is now a distributing company only and procures its supply

of gas of a producing company, and that its contract with such company for gas delivered to its lines, upon a percentage basis of meter readings would expire two years after the passage of said ordinance and three years before the end of the period covered thereby, a proper rate cannot be ascertained without inquiry and determination of the cost of producing gas and transporting it to the lines of the plaintiff in error. Upon this theory much evidence was adduced tending to show that the Logan Company, with which the plaintiff in error has a contract for its supply of gas,
785 for various reasons, cannot furnish its product in the future on terms of its former contract, and included evidence of the value of the plant of the Logan Company, and computations to ascertain what rate would insure it a fair compensation for its share of the service rendered.

An excursion into a vast field thus invited may have been justified under some circumstances, but surely not under the conditions disclosed by this record. In the absence of evidence to the contrary the court was justified in assuming that the contract price for gas remained the same and need not anticipate a condition which might or might not obtain in the future.

Dillon in his work on Municipal Corporations, section 1327, thus states the rule that should guide judicial review of rate-making legislation: "The judiciary ought not to annul or set aside rates established by legislative action unless they are proven or shown to be such as to make their enforcement equivalent to the taking of property for public use without such compensation as under all the circumstances is just, both to the owner and to the public, that is, judicial interference should not occur unless the case presents clearly such a violation of the rights of property under the form of regulation as to satisfy the court that the rates prescribed will have the effect to deprive the company of reasonable compensation for its services."

786 The evidence disclosed in the record does not show that the rates fixed by this ordinance will result in a violation of the rights of property of the plaintiff in error or that it will have the effect to deprive it of reasonable compensation for its services, and therefore, fails to establish a present right of plaintiff in error to exemption from compliance with the terms of said ordinance. Said company will, therefore, be required to abide the test of actual experience under the rate fixed by this ordinance, and when certainty rather than prophesy may be obtained, it will have the right to present its case upon actual facts and conditions as they may then be shown to exist.

It follows that the judgment of the court of appeals is affirmed.
Judgment affirmed.

Johnson, Donahue, Wanamaker, Newman and Jones, JJ., concur.

787 COLUMBUS, OHIO, July 22, 1915.

I hereby certify that the foregiong is a true and correct copy of the opinion in case No. 14787, The Newark Natural Gas and Fuel

Co. v. The City of Newark, Ohio, by Frank A. Bolton, Solicitor, as the same is on file in this office; but the same is subject to revision and addition by the Judges until published in the official reports.

E. O. RANDALL,
*Reporter of the Supreme Court.*

[United States internal revenue documentary stamp, series of 1914, ten cents, canceled 7/21/15. E. O. R.]

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

788 Supreme Court of Ohio, January Term, 1914.

No. 14787.

Title of Case: THE NEWARK NATURAL GAS & FUEL CO.
vs.
THE CITY OF NEWARK, OHIO, by FRANK A. BOLTON, Solicitor.

Action: Error to the Court of Appeals of Licking County.

Attorneys:

Eugene Mackey, Pittsburgh; S. M. Douglas, Mansfield; Fitzgibbon, Montgomery & Black, Newark.
Ralph Norpell, Newark; Frank A. Bolton, Newark; Kibler & Kibler, Newark.

*Docket Entries.*

| Date. | Memo. of pleadings, &c., filed, writs issued, judgments, orders, and decrees. |
|---|---|
| 1914. | "O. A." |
| Dec. 4. | Petition in Error, Waiver of Summons, Court of Appeals Transcript, Original papers and bill of exceptions filed. |
| " " | Papers sent Toledo Legal Brief & Record Co. 1/8/15—Returned. |
| " 10. | Motion by plaintiff to dispense with printing certain exhibits and to refer to originals, and Notice filed. |
| " 15. | Motion to dispense with printing certain exhibits and to refer to originals—Allowed J. 26, p. 623. (See copy of entry attached marked "A.") |
| 1915. | |
| Jan. 8. | Printed record filed. 4/9/15—Proof of service filed. |
| " 19. | Request for oral argument filed by plaintiff's attorneys. |
| Feb. 27. | Request for oral argument filed by Ralph Norpell. |
| Mar. 3 | Plaintiff's printed brief filed. 4/9/15—Proof of service filed. |
| Apr. 29. | Defendant's printed brief filed. 5/10/15—Proof of service filed. |

July 2. Judgment affirmed. Opinion J. 27, p. 49. (See copy entry attached marked "B.")
July 12. Mandate Issued.
" 12. Original papers sent to Clerk.
Aug. 7. Order allowing writ of error. J. 27, p. 160. (See original entry attached marked "C.")
Aug. 7. Order certifying grounds of judgment and entry of affirmance. J. 27, p. 160. (See original entry attached marked "D.")
Aug. 20. Petition for writ of error, order of Hugh L. Nichols, Chief Justice, Allowing writ, Assignment of Errors, Writ of Error, Citation and acknowledgement of service thereof, filed.
Aug. 20. Bond in sum of $3,000.00 signed by plaintiff in error as principal and by P. W. Lupher and S. M. Douglas as sureties, and approved by Chief Justice, filed.
Aug. 20. Certified copy of opinion filed.
Aug. 20. Copy of writ of error lodged for Clerk.
Aug. 20. Copy of writ of error lodged for defendant in error.
Aug. 23. Præcipe for transmissal of entire record filed.

789

Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS & FUEL COMPANY
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, Solicitor.

*Journal Entries.*

"A."

December 15, 1914.

Motion No. 8654—Motion by plaintiff to disperse with printing certain exhibits and to refer to originals in cause No. 14787 on the General Docket.

"It is ordered by the Court that this motion be and the same is hereby allowed."
Journal 26, p. 623.

"B."

No. 14787.

July 2nd, 1915.

"This cause came on to be heard upon the transcript of the Record of the Court of Appeals of Licking County, Ohio, and was argued by counsel. On consideration whereof, it is ordered and adjudged by this Court, that the judgment of the said Court of Appeals be, and the same hereby is affirmed; and it appearing to the Court that

there were reasonable grounds for this proceeding in error, it is ordered that no penalty be assessed herein. It is further ordered that the defendant in error recover of the plaintiff in error its costs herein expended, taxed at $—. Ordered, that a special Mandate be sent to the Court of Appeals of Licking County to carry this judgment into execution."

Journal 27, p. 149.

790 "C."

In the Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS AND FUEL COMPANY, Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, City Solicitor, Defendant in Error.

*Order Allowing Writ of Error from the Supreme Court of the United States to the Supreme Court of the State of Ohio.*

The above entitled cause coming on to be heard upon the petition of the plaintiff in error herein, for a writ of error from the Supreme Court of the United States, to the Supreme Court of the State of Ohio, and upon examination of said petition and the record in said cause, and desiring to give petitioner an opportunity to present to the Supreme Court of the United States the questions presented by the record in said case: it is ordered that a writ of error be, and the same is hereby allowed to this court from the Supreme Court of the United States, and that the bond presented by said petitioner be, and the same is hereby approved.

Columbus, Ohio, August 7, 1915.

HUGH L. NICHOLS,
*Chief Justice of the Supreme Court of the State of Ohio.*

Journal 27, p. 160.

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

791 "D."

In the Supreme Court of Ohio.

No. 14787.

THE NEWARK NATURAL GAS & FUEL CO., Plaintiff in Error,
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, City Solicitor, Defendant in Error.

*Order Certifying Grounds of Judgment and Entry of Affirmance.*

7th day of August, 1915.—On motion of said plaintiff in error, this court orders it to be certified and made a part of the record in this case and of the judgment and entry of affirmance heretofore rendered and made herein, that in the rendition of said judgment of affirmance and because the same was specially pleaded and claimed in the answer of the plaintiff in error, and was again claimed and asserted in the petition in error to the Supreme Court, and that therefore in the rendition of said judgment of affirmance it became and was material to the case to determine whether a certain ordinance and act passed by the City of Newark, Ohio, on the 6th day of March, 1911, by its duly constituted legislative body, fixing a rate for natural gas to be charged by said plaintiff in error was in conflict with the Constitution of the United States, and especially with the provision of the first section of Article 14 of the Amendment to the Constitution of the United States. And the court orders it to be further certified that thereby said plaintiff in error claimed and asked this court to decide and hold that said act of the council of the City of Newark, Ohio, is repugnant to the Constitution of the United States in the particulars stated. This court also orders it to be certified that this said court is the highest court of law or equity in the State of Ohio in which a decision of this character can be had or obtained.

HUGH L. NICHOLS,
*Chief Justice of the Supreme Court of Ohio.*

Journal 27, p. 160.

[Endorsed:] Filed Aug. 20, 1915. Supreme Court of Ohio. Frank E. McKean, Clerk.

792 Supreme Court of Ohio.

14787.

THE NEWARK NATURAL GAS & FUEL CO.
vs.
THE CITY OF NEWARK, by FRANK A. BOLTON, Solicitor.

STATE OF OHIO,
*City of Columbus, ss:*

I, Frank E. McKean, Clerk of the Supreme Court of Ohio, do hereby certify that the foregoing petition for writ of error, assignment of errors, writ of error, citation and acknowledgment of service thereon, præcipe, and opinion, are the original papers in the above entitled cause; that the foregoing copy of bond is a true copy of the original bond filed in my office; that the printed record hereto attached, in two volumes, is a true copy of the record in said cause as filed in the Supreme Court of Ohio and considered by said Court; and that the foregoing transcript of docket and journal entries is truly taken and correctly copied from the records of said Court.

In witness whereof, I have hereunto subscribed my name and affixed the Seal of said Court this 24th day of August, A. D. 1915.

[Seal the Supreme Court of the State of Ohio.]

FRANK E. McKEAN,
*Clerk of the Supreme Court of Ohio.*

793 *Certificate of Lodgment.*

SUPREME COURT,
*State of Ohio, ss:*

I, Frank E. McKean, Clerk of said Court, do hereby certify that there was lodged with me as such Clerk, on August 20th, 1915, in the matter of The Newark Natural Gas and Fuel Company, a corporation, vs. The City of Newark, Ohio:

1. The original bond, of which a copy is herein set forth.
2. Two copies of the Writ of Error, as herein set forth; one for the defendant, and one to file in my office.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at my office in Columbus, Ohio, this 24th day of August, 1915.

[Seal the Supreme Court of the State of Ohio.]

FRANK E. McKEAN,
*Clerk of the Supreme Court of Ohio.*

Endorsed on cover: File No. 24,898. Ohio Supreme Court. Term No. 232. The Newark Natural Gas and Fuel Company, plaintiff in error, vs. The City of Newark, Ohio. Filed August 30th, 1915. File No. 24,898.